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PSITTACOSIS OUTBREAK IN A DEPARTMENT STORE

By L. F. Badger, *Passed Assistant Surgeon, United States Public Health Service*

Four cases of psittacosis, all employees of a department store employing 500 to 600 persons, were reported by 3 physicians, 1 physician reporting 2 cases. It was learned, on visiting these cases, that a number of other employees were ill at the same time with apparently similar symptoms. Most of these were employed on the floor on which parrots were kept.

THE PARROTS

During the latter part of November, 1929, 12 parrots were received from a New York importer. The parrots were in poor condition on arrival, and eight died while in the store. Of the four sold, one, which left the store the first part of January, died three days later, and two, which the purchaser claimed were sick, were returned.

The store building is L-shaped, and a section at the extreme end of one wing on the third floor was reserved for the birds. Besides the parrots, there were also about 40 pairs of parrakeets, of which 10 pair died, and 60 to 70 canaries, of which it was estimated that 5 to 10 died.

Method of handling the birds.—The canaries and the parrakeets were kept in cages. The parrots, during the day, were not kept in cages but on a perch outside and at night were replaced in the crate in which they had been shipped. The crate was kept on the floor not far from the perch. On one occasion the parrots escaped from the crate and were found wandering about the floor on Monday morning. It is understood that two dead parrots were picked up from the floor.

Symptoms in parrots.—The following are the symptoms in the sick parrots as observed by the employees: Refusal to eat; immobility on the perch; "seemed sleepy"; ruffled feathers; and diarrhea.

HUMAN CASES

The investigation of the human cases was hampered by the following circumstances: The management of the store for obvious reasons denied the existence of any unusual prevalence of illness among the employees and was not cooperative; no sick record of the employees was available; the employees were hesitant about giving information; and the physicians did not report to the health department the cases of influenza and pneumonia; and the majority of the cases were diagnosed as one or the other, or both.

It was possible, however, to obtain the names of 25 employees who were absent from work four weeks or longer. The onset of illness in each instance occurred between December 14 and January 13. Twenty-two of the twenty-five cases were among the 50 to 60 employees who worked on the third floor, and 18 of these were among the 20 to 30 who worked in the wing in which the birds were kept. Three worked on the second floor, but had visited the parrots.

Brief histories of 17 cases are reported here. It was impracticable to secure data on the remaining eight cases. The symptoms were approximately the same in all and were typical of psittacosis.

CASE HISTORIES

Case 1.—Patient took care of the birds in addition to other duties. He worked through Saturday, December 14, although he had not been feeling well for several days. During the evening of the 14th and the following day, the symptoms became aggravated and he consulted a physician, complaining of severe headache, chills, fever, loss of appetite, and slight general pains. Temperature between 102° and 103° F. Coarse moist râles throughout chest. A very severe myocarditis. A diagnosis of influenza was made. December 18 a marked congestion of the lungs was noted. Died December 19, on the eighth day of the disease. The death certificate showed influenza and myocarditis as the cause of death. This was probably a case of psittacosis. The case was cared for in the home; no clinical record was kept; no laboratory tests were made.

Case 2.—Reported by physician as psittacosis. Patient took care of birds, in addition to other duties. On December 23 he became suddenly ill. Onset with chills, fever, severe occipital headache, marked malaise, loss of appetite, tongue markedly coated, temperature 103° F. Early in the disease the pulse and respiratory rates were not rapid; but as the disease progressed, the pulse rate became 124. The respiratory rate remained slow. The chest examination revealed coarse râles throughout, but there were no definite findings of pneumonia at any time. The attending physician expected pneumonia to develop, but no definite signs were ever observed. Although the lung findings persisted, the cough remained slight, with practically no expectoration. The disease was marked by extreme and persistent delirium. The duration of the febrile period was 17 days. Treated in home. During acute illness no laboratory tests were made. Approximately one month after onset, Widal was negative. Agglutinations for *Bacillus abortus*, negative. Feces negative for typhoid group.

Case 3.—Patient fed the birds and cleaned the cages. Frequently handled and fondled the parrots. Became ill on December 20, complaining of severe occipital headache, malaise, fever, chills, and loss of appetite. On examination, the tem-

perature was 104° F., tongue coated, and coarse moist râles throughout the chest. In addition to the râles there were areas of atypical pneumonia. The course of the disease was marked by indefinite pneumonic findings, high fever with slow pulse and respiratory rates, an unproductive cough, epistaxis, constipation, and delirium.

Case 4.—Patient worked in close proximity to the parrots; frequently handled and fondled them. On December 24 became ill with severe headache, principally occipital; slight general pains, malaise, loss of appetite, chills and fever. In a day or two an unproductive cough appeared. There was diarrhea for two or three days, followed by constipation. A physician was called on January 5, the twelfth day of the disease, at which time the temperature was 104° F., pulse 100, tongue markedly coated, slight delirium, and throughout chest were found coarse moist râles. Although expected, there were no definite signs of pneumonia. Physicians statement: "Would be called broncho-pneumonia if anything." The temperature remained between 102° and 104° F., for 3 or 4 days, then around 101° for 8 days and gradually fell to normal on the twenty-eighth day. The pulse remained around 100, and the respirations around 24. No laboratory tests were made.

Case 5.—Patient worked in close proximity to the parrots. Denied ever handling the birds. On December 16 became ill, complaining of a severe headache, general malaise, slight pain in chest, chills, fever, loss of appetite, and a moderate diarrhea. A physician was called in the evening, at which time the temperature was 103° F. The tongue was markedly coated, coarse mucous râles throughout the chest, and a small area of consolidation later appeared over the right lobe. Before the area of consolidation appeared, the physician thought that he was dealing with a case of ordinary influenza, but became puzzled when the temperature remained high. When the consolidation appeared he was further puzzled, as the pulse rate remained between 80 and 100, the respiratory rate between 20 and 22, and the findings in the lungs were not typical of a frank lobar pneumonia. The total white blood cell count was at no time over 8,400. As the symptoms did not respond to the therapy employed, mercurochrome in 5-cubic-centimeter doses was given intravenously, one dose daily for three days, with no response. The temperature first reached normal again on the fourteenth day of the disease.

Case 6.—Patient worked in close proximity to the parrots. Had handled the birds. On December 24 he became suddenly ill, complaining of severe headache, chills, fever, malaise, loss of appetite, and slight general pains. First seen by a physician on fourth day of illness, at which time the temperature was 103° F., pulse rate 100 to 110, respiratory rate normal, tongue coated, slight unproductive cough, and constipation. There was a pronounced bronchitis. The physician stated that each morning he expected to find definite signs of pneumonia, but they never appeared. On the ninth day of the disease the temperature became normal and remained normal for one week, when a second febrile period occurred, lasting seven days. During the second febrile period the temperature again reached 103° F., and the symptoms, though less severe, were repeated. No laboratory tests were made.

Case 7.—Patient worked in close proximity to the parrots and frequently handled them. Became ill on December 20, complaining of severe headache, chills, fever, malaise, loss of appetite, constipation, and slight cough. Physician was called on the seventh day of illness. Temperature 102° F., pulse 84, respiratory rate normal, blood pressure 80/50. Examination of the chest revealed râles throughout the right chest and evidence suggestive of pneumonia over the base. The physician stated that the patient never seemed as ill as the chest findings indicated. With the findings in the chest the respiratory rate remained but slightly increased. The temperature during the second week was 102° F., or

under. The readings were always made in the morning. The pulse remained slow, between 66 and 90. The blood pressure gradually returned to normal. Three weeks after the onset the patient was up in a chair. The physician at first, although informed of the many cases of illness among the employees of the store and of the sick parrots, did not think that he was dealing with psittacosis; but later, after watching the course of the disease, was in doubt. No laboratory tests were made.

Case 8.—Patient worked in close proximity to the parrots; had been in direct contact with them. On December 24 became ill, complaining of severe headache, malaise, loss of appetite, chills and fever. Temperature 104° F. During the course of the disease there developed a slight unproductive cough. From the chest findings the physician thought that pneumonia would develop, but no definite findings were observed. The duration of the febrile period was two weeks.

Case 9.—Worked in close proximity to the parrots. Denies ever handling the birds. Became ill on January 13, at 2 p. m., and felt that he had a fever. Temperature taken by nurse, who found it to be normal. At 4.30 p. m., temperature was 102°. Soon complained of severe headache, malaise, slight general pains, and loss of appetite. On the following day patient was examined by a physician. Temperature was 104° F.; pulse rate, 100; respiratory rate, 20; tongue coated; coarse moist râles were heard throughout the chest, but no definite findings of pneumonia. At one time a small area of tubular breathing was heard over the left lobe. The physician expected definite signs of pneumonia to develop, but on the following day the tubular breathing was not heard. The temperature remained between 102° and 103° until the fifteenth day of the disease, when it became normal. The pulse throughout the disease remained between 100 and 110; the respirations 20 to 22. Psittacosis was considered but ruled out because of the lack of gastro-intestinal symptoms. The case was undoubtedly one of psittacosis. No laboratory tests were made.

Case 10.—Patient worked in close proximity to the parrots. Denied ever having handled the birds. On December 27 became ill, complaining of severe headache, marked malaise, loss of appetite, chills, fever, and slight general pains. On examination, temperature 102.5° F., pulse 80, tongue coated, constipation, and indefinite lung findings. The fever continued for four weeks; the pulse varied between 80 and 112. During the course of the disease there was a slight unproductive cough. Definite delirium at times. Total number of white cells 8,150, neutrophiles 69, eosinophiles 1, lymphocytes 23, and monocytes 7 per cent.

Case 11.—Patient had worked as floor boy on the floor on which the parrots were kept. History of possibility of direct contact undetermined. On January 6, patient became ill, complaining of severe headache, malaise, chills, fever, loss of appetite, some cough and constipation. After one week of illness, physicians were changed. The following information was received from the second physician: Temperature, 103° F.; pulse and respiratory rate not rapid; some delirium; coarse râles throughout the chest, and evidence of consolidation "in the middle of each lung." No abnormal heart findings. The temperature became normal on the fourteenth or fifteenth day of the disease. There had occurred, as complication, a phlebitis of the right femoral vein. After a two or three day period of normal temperature, the patient, while walking, suddenly died. Cause of death: Embolism. No laboratory tests were made.

Case 12.—Reported as psittacosis. Patient employed on the floor on which the parrots were kept. Denies any direct contact with the birds. Became suddenly ill on January 6, complaining of slight headache, malaise, severe chills, fever, and loss of appetite. Temperature 105° F., pulse rate around 100, respiratory rate normal, coarse râles heard throughout the chest with an area of con-

solidation in the lower right lobe. During the course of the disease the temperature varied between 104° and 105° F.; pulse rate 90 to 130, generally around 100; respiratory rate normal; marked coating of the tongue; constipation; epistaxis; no cough; slight delirium; urine and feces negative for the typhoid group.

Case 13.—Reported as psittacosis. Patient employed on the floor on which the parrots were kept. Had handled and petted the birds. On January 1, became ill, complaining of severe headache, malaise, chills, fever, slight general pain, and loss of appetite. First seen by a physician on third day of illness; temperature 103° F., pulse around 100, respiratory rate slightly increased, marked coating of the tongue, and coarse râles throughout the chest. During the course of the disease temperature varied between 102° and 104° F., for three weeks. On the twenty-first and twenty-second day the temperature was normal, followed by a 4-day febrile period, after which the temperature became and remained normal, the pulse remained around 100, the respiratory rate normal or but slightly increased, localized areas of atypical pneumonia in the lungs, persistent but slight unproductive cough, epistaxis, constipation, and rather marked delirium. Total white blood cells 4,900.

Case 14.—Patient employed on the floor on which the parrots were kept. Had handled dead and living parrots. On January 11 became ill, complaining of severe occipital headache, malaise, chills, fever, slight general pains, and loss of appetite; temperature 103.2° F., pulse 100, respiratory rate normal, slight unproductive cough, indefinite chest findings, marked coating of the tongue, and constipation. The temperature ranged around 102° to 103° for approximately 10 days, the pulse around 100 to 110, and the unproductive cough persisted. The febrile period was followed by an afebrile period lasting 10 days, when a second febrile period of two weeks' duration occurred. The symptoms were the same, but less severe, the temperature ranging between 100° and 101°. No laboratory tests were made.

Case 15.—Reported as psittacosis. Patient employed on another floor of the store, but had visited and handled the parrots. On December 24 became ill, complaining of severe headache, malaise, chills, fever, and loss of appetite; temperature 103° F., pulse 104, respiratory rate normal, tongue coated, diarrhea, slight unproductive cough, and pronounced bronchitis. During the course of the disease, highest temperature was 104° F., ranged from 102° to 103° for two weeks, reached normal on nineteenth day; pulse remained around 100, respiratory rate remained normal, slight unproductive cough persisted, and in addition to coarse râles throughout the chest there appeared indefinite areas of atypical pneumonia; there were slight delirium and diarrhea. No laboratory tests were made.

Case 16.—Patient employed on another floor, but had visited and handled the parrots. On January 13 patient became ill, complaining of severe headache, malaise, chills, fever, and loss of appetite. A physician was called on the third day; temperature 104° F., pulse rate 90, respirations but slightly increased, coarse moist râles throughout chest, and, although expected by the physician, definite consolidation did not occur. Temperature returned to normal on the sixteenth day. Pulse rate ranged between 90 and 110; on one day it reached 124. After three days of normal temperature, patient suddenly died while walking. For two to three days before death had complained of a pain in the right leg. At no time during the illness was any cardiac abnormality noted. Death was possibly due to embolism. No laboratory tests were made.

Case 17.—Patient was a visitor to the store; frequently visited and petted the parrots. The last contact with the birds was on December 23 or 24. On December 31 became ill, complaining of general malaise, severe occipital headache, chills, fever, and loss of appetite. Physician's examination on seventh day: Temperature 101.2° F., pulse rate 100, respiratory rate 20, slight unproductive cough,

coarse moist râles over left lung. During following week temperature reached 106° F., pulse rate from 100 to 124, generally 100 to 110, respiratory rate 20 to 24. At one time the physician observed findings suggestive of pneumonia in the left lung. This was not constant. Physician thought he was dealing with central pneumonia, although the diagnosis was not borne out by the pulse and respiratory rate. Marked delirium occurred Died on the sixteenth day. No laboratory tests were made.

Summary of symptoms.—The following are the symptoms of these cases summarized: Rather sudden onset; chills; fever; malaise; severe headache, most frequently occipital; loss of appetite; coated tongue; constipation (occasionally diarrhea); unproductive cough; marked bronchitis with indefinite areas, suggesting pneumonia; fever reaching 103° or 104° F.; lack of definite gastrointestinal symptoms; lung pathology out of proportion to other findings; delirium varying in degree; leucocyte count normal or below.

Mode of contact.—Psittacosis may be contracted by both direct and indirect contact. The majority of cases have occurred as house infections in families having sick birds. Undoubted cases have, however, been contracted by indirect contact. Nine members of the personnel of the Hygienic Laboratory, in Washington, who had no direct contact with infected birds or material in any way, contracted psittacosis. From the manner in which the parrots were handled in the department store, there existed ample opportunity for both methods of infection. The birds were cared for by four of the employees, three of whom became ill. Other employees would frequently visit and handle the birds; particularly was this true during the noon hour. It was probably not rare for customers to come in direct contact with the birds. The opportunity for infection through indirect contact was also great, especially since the parrots were kept on a perch outside of any cage during the day and on one occasion had escaped from their cage and were free about the floor.

Four of the cases, on whom complete histories were obtained from their physicians, denied any direct contact, 12 admitted direct contact, and in 1, due to death, the mode of contact was undetermined.

SUMMARY AND DISCUSSION

Twenty-five employees were absent from work for periods of four weeks or longer. The onset of their illness occurred between December 14 and January 13. Histories typical of psittacosis were obtained on 17 of the 25. Parrots obtained from the same importer as were those of this study have caused cases of psittacosis in other sections of the country.

In addition to the parrots, some of the parrakeets might have been a factor in the spread of the disease. Approximately 24 parrakeets died, and numerous reported cases of psittacosis have been contracted from this bird.

There were probably many unknown cases occurring among the employees. It was not uncommon for employees from floors other than the one on which the birds were kept to visit and handle the parrots, yet but three cases in such employees are known. One case, terminating fatally, occurred in a nonemployee who had visited and fondled the parrots. There existed a possibility that other similar cases occurred.

A remarkably high morbidity rate occurred in the employees on the floor on which the birds were kept. The floor is L-shaped, and a section at the end of one wing was reserved for birds. In this wing from 20 to 30 persons were employed, among which 18 of the known 25 cases occurred.

THE NATIONAL INSTITUTE OF HEALTH

Successor to the Hygienic Laboratory

By the act of Congress approved May 26, 1930, entitled "An act to establish and operate a National Institute of Health, to create a system of fellowships in said institute, and to authorize the Government to accept donations for use in ascertaining the cause, prevention, and cure of disease affecting human beings, and for other purposes," the Hygienic Laboratory will hereafter be known as the National Institute of Health. This act is as follows:

[PUBLIC—No. 251—71ST CONGRESS]

[S. 1171]

An Act To establish and operate a National Institute of Health, to create a system of fellowships in said institute, and to authorize the Government to accept donations for use in ascertaining the cause, prevention, and cure of disease affecting human beings, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Hygienic Laboratory of the Public Health Service shall hereafter be known as the National Institute of Health, and all laws, authorizations, and appropriations pertaining to the Hygienic Laboratory shall hereafter be applicable for the operation and maintenance of the National Institute of Health. The Secretary of the Treasury is authorized to utilize the site now occupied by the Hygienic Laboratory and the land adjacent thereto owned by the Government and available for this purpose, or when funds are available therefor, to acquire sites by purchase, condemnation, or otherwise, in or near the District of Columbia, and to erect thereon and to furnish and equip suitable and adequate buildings for the use of such institute. In the administration and operation of this institute the Surgeon General shall select persons who show unusual aptitude in science. There is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, the sum of $750,000, or so much thereof as may be necessary for construction and equipment of

additional buildings at the present Hygienic Laboratory of the Public Health Service, Washington, District of Columbia.

SEC. 2. The Secretary of the Treasury is authorized to accept on behalf of the United States gifts made unconditionally by will or otherwise for study, investigation, and research in the fundamental problems of the diseases of man and matters pertaining thereto, and for the acquisition of grounds or for the erection, equipment, and maintenance of buildings and premises: *Provided*, That conditional gifts may be accepted if recommended by the Surgeon General and the National Advisory Health Council. Any such gifts shall be held in trusts and shall be invested by the Secretary of the Treasury in securities of the United States, and the principal or income thereof shall be expended by the Surgeon General, with the approval of the Secretary of the Treasury, for the purposes indicated in this act, subject to the same examination and audit as provided for appropriations made for the Public Health Service by Congress. Donations of $500,000 or over in aid of research will be acknowledged permanently by the establishment within the institute of suitable memorials to the donors. The Surgeon General, with the approval of the Secretary of the Treasury, is authorized to establish and maintain fellowships in the National Institute of Health, from funds donated for that purpose.

SEC. 3. Individual scientists, other than commissioned officers of the Public Health Service, designated by the Surgeon General to receive fellowships may be appointed for duty in the National Institute of Health established by this act. During the period of such fellowship these appointees shall hold appointments under regulations promulgated by the Secretary of the Treasury and shall be subject to administrative regulations for the conduct of the Public Health Service. Scientists so selected may likewise be designated for the prosecution of investigations in other localities and institutions in this and other countries during the term of their fellowships.

SEC. 4. The Secretary of the Treasury, upon the recommendation of the Surgeon General, is authorized (1) to designate the titles and fix the compensation of the necessary scientific personnel under regulations approved by the President; (2) in accordance with the civil service laws to appoint, and in accordance with the classification act of 1923, and amendments thereto, fix the compensation of such clerical and other assistants; and (3) to make such expenditures (including expenditures for personal services and rent at the seat of government, for books of reference, periodicals, and exhibits, and for printing and binding) as he deems necessary for the proper administration of such institution.

SEC. 5. The facilities of the institute shall from time to time be made available to bona fide health authorities of States, counties, or municipalities for purposes of instruction and investigation.

SEC. 6. That hereafter the Director of the National Institute of Health while so serving shall have the rank and shall receive the pay and allowances of a medical director of the Public Health Service.

Approved, May 26, 1930.

The general purposes of the act are to provide larger facilities for investigations of diseases of man and matters pertaining to the public health, to encourage research and the training of individuals engaged

therein, to enable the Government to accept bequests in aid thereof, and to bring about cooperation with scientific institutions in the prosecution of research work.

Scientific research is the most important function of the Federal Government as relates to public health. While steady progress has been made in this field, the problems presented are becoming increasingly complex. There is necessity, therefore, that larger facilities should be provided, that means be adopted whereby the services of trained scientists can be utilized, and cooperation on the part of the Public Health Service with scientific institutions can be encouraged.

Public health investigations by the Public Health Service were first authorized in 1901. Since then substantial progress has been made and many new facts have been discovered which have had an important bearing on the prevention and control of disease. The necessity for this work far outstripped the facilities for its conduct. Under the above-mentioned authority, these facilities may be greatly enlarged.

In its development the new institute will have the advantage of the traditions of the Hygienic Laboratory. In reality the Hygienic Laboratory becomes the National Institute of Health, which, with enlarged facilities, will be devoted to investigations of the underlying problems not only of communicable diseases but of degenerative diseases and environmental conditions affecting health.

In aid of this work the Secretary of the Treasury may hereafter accept gifts to be held in trust and used for the purposes mentioned; the expenditures to be safeguarded in all respects as are other governmental funds. These gifts may also be used for the establishment of fellowships to encourage individual scientists. Appointments and services under these fellowships will be governed by laws and regulations affecting the United States Public Health Service. Individual ability is the most valuable asset of a people of a country. The object is to encourage postgraduates of extraordinary ability and to aid them to follow permanently their scientific bent in the interests of humanity.

In order that those who make gifts may have a living part in the development of the institute, provision is made whereby donations of $500,000 or over will be acknowledged permanently by the establishment within the institute of suitable memorials.

During consideration of the measure before the Senate, July 2, 1926, Senator Joseph E. Ransdell, its author, stated in part as follows: [1]

"The Government should lead in efforts of health, and should secure active, close cooperation of all health agencies in the Union, public and private, so as to get the full benefit that comes from united effort. It should show no rivalry or jealousy toward private endowments, foundations, institutions, schools, municipal, and State health departments, but merely a friendly leadership in a concentrated effort to

[1] Congressional Record, May 21, 1930, pp. 9633 et seq.

conquer disease and relieve human suffering, to prolong the term of life, and make our sojourn on earth more pleasant and free from pain. This institution should be an international clearing house for health. It should keep in close touch with every agency that is trying to conquer disease, not only in the United States but throughout the entire world.

"A vast amount of research work is awaiting the attention of scientists in the field of medicine and its application for the alleviation of suffering. It is through the joint intensive efforts of chemist, physicist, physiologist, pharmacologist, pathologist, immunologist, and physician that remedies must come for the above-named ailments and others to which the human race is susceptible."

"A great medico-chemical research laboratory, fully equipped to cope with all diseases that afflict mankind, where he can carry on his important work fruitfully and in an unlimited way, is the need of the American scientist.

"Progress in future may be expected to depend on the advancement of scientists, and that country will be most benefited whose citizens are encouraged to engage in systematic research and aided in doing so.

"With moderate amounts of funds and good standing from a scientific standpoint, the health agency of the Federal Government may outline the future public health field, may encourage coordination of effort and may aid in actual investigations of problems and associate other official and unofficial agencies in these investigations.

"The system of maintenance of research by means of appropriations should be continued. In future, the effort should be to utilize these appropriations not only for the conduct of investigations but the coordination of scientific effort and the maintenance of advisory and supervisory agents in the interest of science.

"Philanthropists may well be encouraged to establish endowments for the conduct of research and above all for the training and employment of scientists. They may be encouraged also to make donations for the use of the Federal Government in the promotion of scientific effort.

"I can not suggest anything * * * that will do as much good to humanity as to contribute generously to their Federal Government for public health purposes in combating disease."

RESULTS OF THE OPERATION OF THE STANDARD MILK ORDINANCE IN MISSISSIPPI [1]

By A. W. Fuchs, *Sanitary Engineer, United States Public Health Service,* and H. A. Kroeze, *Director, Bureau of Sanitary Engineering, Mississippi State Board of Health*

Since 1923 the United States Public Health Service has encouraged the adoption of a uniform, effective milk-sanitation program in the cities and States of the United States. This program had its birth in Alabama, in that year, when the Alabama State Board of Health

[1] Read before the Annual Conference of Health Officers of Mississippi at Jackson, Miss., Dec. 12, 1929.

called upon the Public Health Service to formulate for it and assist it in beginning the execution of a state-wide plan of milk control.[2] The plan developed by the Public Health Service was so successful in improving the quality and increasing the consumption of milk in Alabama cities[3] that near-by States, one after another, adopted the plan and called upon the Public Health Service for advice and assistance, until now some 20 States have adopted the program and over 300 cities are controlling their milk supplies under the standard milk ordinance.

The rapid spread of the standard milk ordinance may be explained by the previous unsatisfactory status of milk control. The chaotic state of milk control was permitting the occurrence of milk-borne outbreaks of communicable disease. The nonuniformity of requirements caused the dairy industry to discredit the health officer's knowledge of milk sanitation. The conflicting methods of milk control were partly responsible for inadequate milk consumption. Finally, many States realized the need for a uniform, effective milk-control program.

The provisions and operation of the standard milk ordinance will not be explained in detail, since this has been adequately covered in a previous publication.[4] Suffice it to state that the ordinance requires that milk be periodically graded (the grades to be based on inspections and analyses) and that all bottles and cans be labeled with the grade awarded by the health officer, and leaves to each community the decision as to which grades shall be permitted to be sold.

To promote uniform interpretation and enforcement, the Public Health Service found it advisable in 1926 to prepare what has become known as the Standard Milk Control Code. This code takes up the ordinance item by item, gives in detail what is recommended as satisfactory compliance, and outlines the public health reason for each item. All the national dairy and public health organizations have been invited to discuss it and to suggest modifications.

On July 18, 1927, the Mississippi State Board of Health adopted the standard milk ordinance as State Regulations Governing the Production and Sale of Milk and Certain Milk Products, superseding the regulations adopted in 1925, and recommended them to the municipalities of Mississippi for adoption. In cooperation with the Public Health Service, the bureau of engineering of the State board of health made preliminary surveys of the milk supplies of a number of cities and urged the adoption of the standard milk ordinance.

[2] A State-wide Milk Sanitation Program. Pub. Health Rep., Nov. 7, 1924. Reprint No. 971.

[3] Standard Milk Ordinance Results In Fourteen Alabama Towns. Pub. Health Rep., Mar. 11, 1927. Reprint No. 1144.

[4] A National Program for the Unification of Milk Control. Pub. Health Rep., July 30, 1926. Reprint No. 1098.

By the end of 1927, 11 cities had either passed the ordinance directly or had obtained it automatically through the adoption of the State sanitary code. In 1928 the number increased to 19. At present 26 cities in Mississippi have the standard milk ordinance.[5] Prior to the inauguration of this program only six cities in the State were doing any milk-control work worthy of the name.

The list of standard ordinance cities contains communities ranging in population from less than 2,000 to over 40,000, and includes practically all cities in the State having a population of 10,000 or more.[6] The standard ordinance now affords satisfactory control of milk to an aggregate population comprising over three-fourths of the total urban population of the State (i. e., cities over 2,500). Practically all cities operating under the standard milk ordinance are located in counties having full-time health units. As the remaining counties provide for full-time health service, it will become possible to enlarge the list of standard ordinance cities.

All but three of the standard ordinance cities have publicly announced milk grades from one to seven times. While the ordinance requires grading at least every six months, most of the cities consider it advisable to announce grades more frequently, some aiming at quarterly gradings. The average interval for the total of 80 grade announcements made in the 23 cities that have graded to date has been 124 days, or about 4 months. The sale of all grades of milk is permitted except in Biloxi, where the sale of grade D is proscribed.

Whatever success has attended the milk control program has been due largely to the interest and attention devoted to it by the local health departments. Without the valuable coordination, training, and advice rendered by the State board of health representatives, however, uniformity of methods would have been impossible of attainment. The Public Health Service representative in the State has made ratings of the milk sanitation and of the degree of enforcement in the cities, both before the ordinance became operative and at least every five months since. These ratings afford an accurate measure of the improvements effected under the standard milk ordinance.

The improvements in milk quality achieved in the 24 Mississippi cities which had adopted the ordinance prior to July, 1929, have been charted from data furnished by the Public Health Service ratings.

Chart 1 is a composite picture of the preenforcement conditions as compared with recent conditions (i. e., during the last half of 1929) surrounding the production, handling, and sale of retail raw milk. Each bar represents the percentage of the total volume of retail raw milk complying with that particular item of the requirements for

[5] Since this paper was read the number of cities has increased to 29.
[6] All cities of 10,000 or more now included.

grade A raw milk as given in the Standard Milk Control Code. Chart 1 reveals the general improvement in retail raw milk supplies of the 24 cities. The weighted average retail raw milk sanitation rating of these supplies prior to enforcement of the ordinance was 46.4; the recent rating was 88.2, an improvement of 91 per cent. These

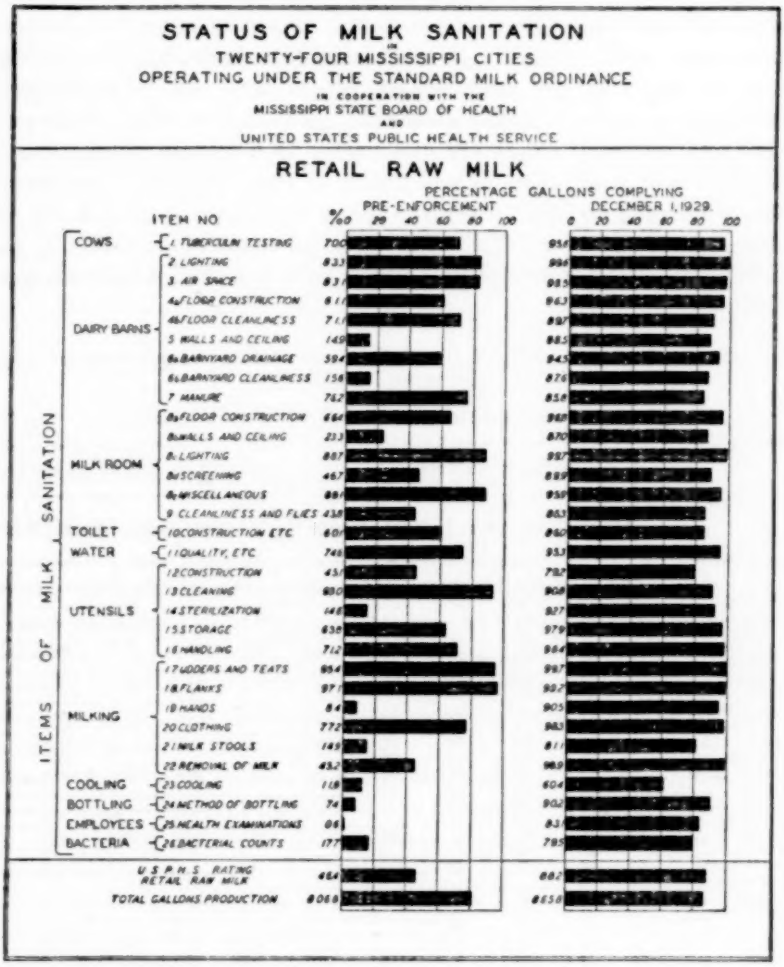

CHART 1

weighted averages are computed[7] by weighting each item according to its importance, multiplying this figure by the per cent of the total number of gallons complying with the item, thus obtaining the credit, and adding the credits for all the items, on a basis of 100. Prior to enforcement, only 7 of the 32 items had a rating of 80 or more; the

[7] See Reprint No. 1098.

recent ratings show 29 items rating over 80 per cent compliance, and only 3 under that figure. It is only fair to state that the preenforcement ratings of cooling and bacterial count are not reliable, as data were available for only a few cities.

The three items rating less than 80 per cent compliance on recent ratings are (12) "Construction of utensils," (23) "Temperature on delivery," and (26) "Bacterial counts." Item 12 rates low because many milk pails originally in good condition have, after a year or more of use, acquired open seams which have not been properly resoldered so as to be easily cleanable. The low ratings on temperature and bacterial count are due partly to a certain percentage of milk of lower grade than A, and partly to the method of calculating ratings whereby no credit was given if any dairyman's supply averaged a temperature of over 50° F. or a bacterial count of over 50,000 per cubic centimeter for the grading period, or if less than 4 samples were taken.

Table showing United States Public Health Service sanitation and enforcement ratings, December 31, 1929

(Mississippi State Board of Health, Bureau of Sanitary Engineering)

City[1]	Rating of retail raw milk					Rating of raw milk sold to plant				
	Preliminary	First	Second	Third	Fourth	Preliminary	First	Second	Third	Fourth
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Belzoni	25	77	39					87		
Biloxi	31					31				
Brookhaven	48	88								
Clarksdale	34	86	91	90		36	37	39	36	
Cleveland	53	94	94							
Columbus	54	88	81	84		42	85	83	87	
Durant	29	77								
Greenville	53	89	90	98				90	90	
Greenwood	50	74	87	85	87		65	80	80	
Hattiesburg	32	89	88	94	90				82	82
Indianola	28	85	76	92	92				83	87
Jackson	68	87	89	91		60	83	91	90	
Laurel	77	93	95	92						
Leland	29	84	84	94						
Lexington	16	90								
Meridian	33	85	89	88	87	22	72	75	70	65
Natchez	41	84								
New Albany	25	84	93							
Ocean Springs	39									
Picayune	37	81	66							
Poplarville	41	73	80							
Rosedale	37	94	69							
Shelby	44	49	45			45	69	81		
Tupelo	51	84	91	86	83					
Vicksburg	47	80	92	94			89	96	90	
Yazoo City	51	85	94	92						

[1] Pascagoula, Moss Point, and Gulfport have adopted the ordinance since this list was prepared.

Table showing United States Public Health Service sanitation and enforcement ratings, December 31, 1929—Continued

City[1]	Rating of pasteurization plants					Rating of enforcement methods			
	Preliminary	First	Second	Third	Fourth	First	Second	Third	Fourth
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Belzoni			87			29			
Biloxi	56								
Brookhaven						90			
Clarksdale	27	66	100	84			91	80	
Cleveland						77	90		
Columbus	63	71	80	98		66	70	73	
Durant						84			
Greenville			84	92			78	76	
Greenwood		76	60	50		93	88	76	88
Hattiesburg				61	70		77	80	79
Indianola				68	72		69	71	78
Jackson	34	81	85	100			80	86	
Laurel							77	82	
Leland							71	88	
Lexington						87			
Meridian	25	74	55	79	83		74	64	66
Natchez						78			
New Albany						86	89		
Ocean Springs									
Picayune						74	72		
Poplarville						74	78		
Rosedale						74	88		
Shelby	37	73	59			77	81		
Tupelo							73	78	81
Vicksburg		68	84	80			82	83	
Yazoo City							83	91	

[1] Pascagoula, Moss Point, and Gulfport have adopted the ordinance since this list was prepared.

The accompanying table shows all the ratings that have been made to date for each standard ordinance city in the State. The first section shows the ratings of retail raw milk, the second the ratings of raw milk sold to plants, the third the ratings of pasteurization plants, and the fourth shows the ratings of enforcement methods. It will be noted that only 7 cities had a preenforcement retail raw milk rating of over 50 per cent, while in the latest ratings only 5 of the 24 cities fall under 80 per cent.

Pasteurized milk is now available in 10 of the 24 cities included in the ratings. Chart 2 indicates the improvement effected in the quality of the milk delivered to the pasteurization plants. The preenforcement figures apply to only five cities. In the other five no pasteurized milk was sold at the time when the standard ordinance was enacted. It is seen that there has been a tremendous improvement in most of the items as compared with former conditions. The weighted average sanitation rating of raw milk sold to plants prior to enforcement of the ordinance was 42.8; the recent rating was 80.9, or an improvement of 89 per cent. It is significant, in comparing Charts 1 and 2, to observe that, except for a few items, the conditions surrounding the production of milk for pasteurization are almost as good as those under which the retail raw milk is produced.

Referring again to the table showing ratings for the individual cities, it is noted that on raw milk sold to plants only one city had a

rating of over 50 prior to enforcement of the standard ordinance, whereas the last ratings made show only two cities under 80.

Chart 3 indicates the improvement effected in the pasteurization plants under the standard ordinance. Before enforcement, only nine of the 31 items were rated 80 or better, while recent surveys

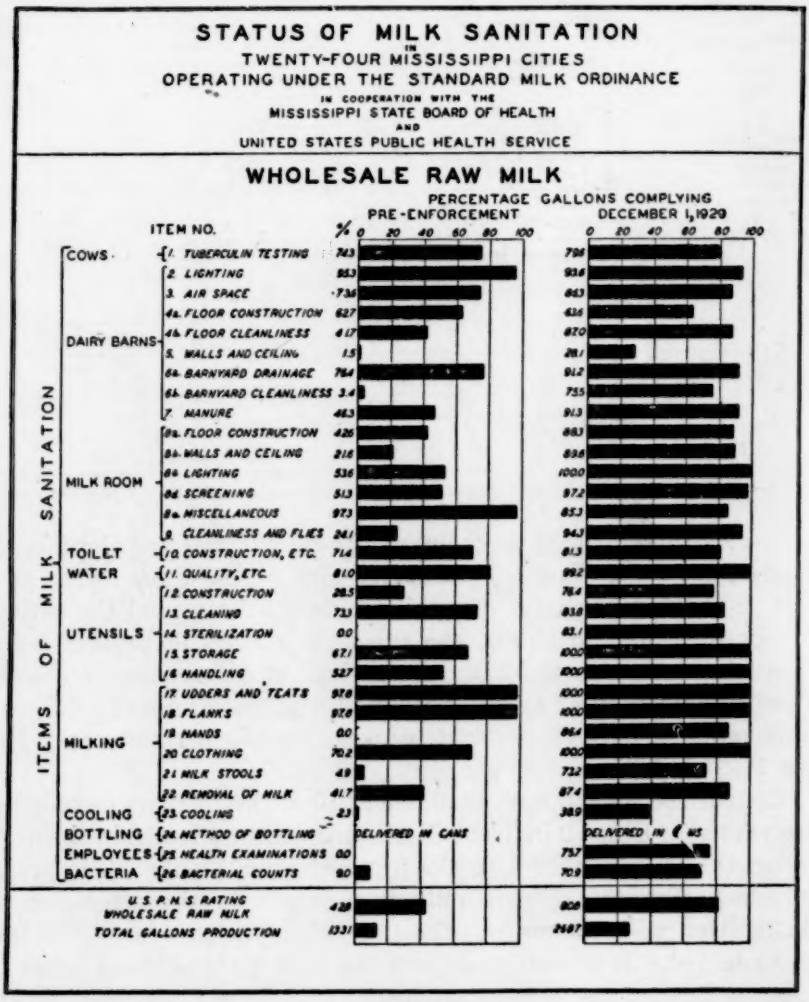

CHART 2

show only three items with a rating under 80. To put it differently, the status of pasteurization plants has changed from a weighted average rating of 43.6 before enforcement to a rating of 91.1 at the present, or an improvement of 109 per cent. This must be considered a remarkable change.

The ratings of item 16(d) were made in accordance with the old code, which permitted a foam area up to 10 per cent of the entire

surface without requiring the heating of the air. None of the vats in the Mississippi Standard Ordinance cities is equipped with any air-heating device. Even if the foam-heating requirement of the latest code were applied, probably not over 10 per cent of the pasteurized milk in these cities would be found to be violating this item.

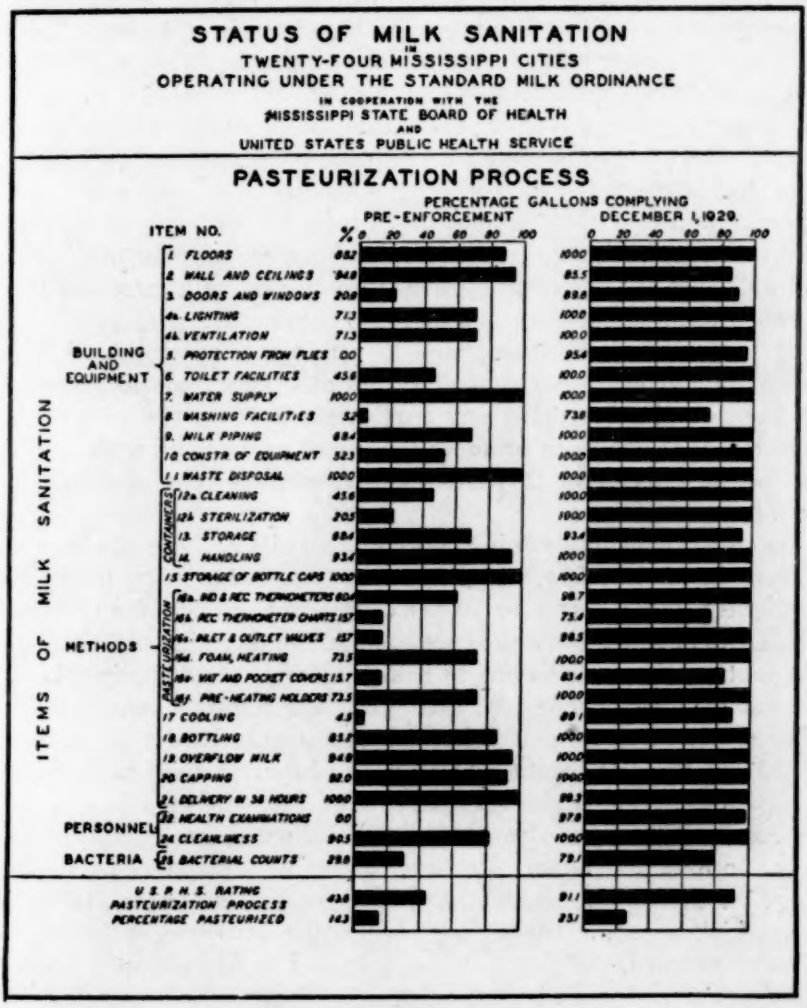

CHART 3

The table containing the rating of pasteurization plants for the several cities shows only two cities with a preenforcement rating over 50, while the last rating made on each city shows only three having a rating below 80.

With reference to the last section of the table showing ratings of enforcement methods for each city, it is noted that while most of the

latest ratings indicate a satisfactory enforcement of the ordinance, it is evident that a few health departments have manifested only a half-hearted interest in the subject of adequate enforcement of the provisions of the ordinance.

Improvement in the quality of market milk is only one of the two main objectives of the standard milk ordinance. The other objective, also of great public health importance, is to increase the consumption of milk. As nearly half of the standard ordinance cities in the State have graded their milk for less than a year, it is perhaps too soon to expect any great improvement in consumption. However, our figures show a total preenforcement consumption of market milk, in the 24 cities that have graded their milk, of 9,410 gallons, as compared with a recent total of 11,566 gallons, or an increase of 23 per cent. The most encouraging feature, moreover, has been the increase in pasteurized milk. While the consumption of retail raw milk increased only 7 per cent, that of pasteurized milk rose 117 per cent. Before enforcement pasteurized milk comprised 13 per cent of the total, while at present it is over 25 per cent of the total. This remarkable result has been obtained without any particular effort on the part of the State board of health to promote the use of pasteurized milk, and in the face of opposition to pasteurization which is characteristic of small towns.

Regarding consumption in the individual cities, there has been an increase in all but five. In these five the consumption has fallen off slightly, in no case over 10 per cent, and these are, for the most part, cities in which the ordinance has not long been in operation.

A matter of some concern to health officials of Mississippi is the low per capita consumption, even after the improvement that has taken place. Based on an estimated total population for the 24 cities of 246,000, the per capita consumption of market milk is only 0.38 pint per day. The larger cities of the State have, as a rule, a higher per capita consumption than this, while the smaller cities, particularly those in the Delta, are lower than the average. In smaller towns we usually find a greater proportion of family cows, the milk from which is not, of course, included in the market milk figures.[8]

To summarize, the results so far obtained in Mississippi after but two years' experience with the standard milk ordinance are as follows:

There are now 26[9] cities, containing over 75 per cent of the State's urban population, enjoying a high-grade protection of their milk supplies, as against 6 cities formerly. The improvement in sanitary quality has been quite satisfactory; the retail raw milk has improved 91 per cent, the raw milk delivered to pasteurization plants 89 per

[8] See Milk Consumption in Eighteen Small Alabama Communities, by Leach and Frank. Reprint 1255 from the Public Health Reports. This study shows an average consumption of 0.95 pint per capita per day (including family cow milk), and is probably representative of small southern towns.

[9] By Feb. 15, 1930, the number had increased to 29.

cent, and the pasteurization plants 109 per cent. Milk consumption has increased 23 per cent. The number of cities having pasteurized milk has doubled, and the consumption of pasteurized milk has risen 117 per cent. With longer experience, stricter enforcement, and the adoption of the ordinance by more cities, we may look forward in the next few years to an excellent milk supply for all of Mississippi.

CURRENT PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES [1]

April 27–May 24, 1930

The prevalence of certain important communicable diseases as indicated by weekly telegraphic reports from State health departments [2] to the Public Health Service is summarized below. This summary is prepared from the data published in the PUBLIC HEALTH REPORTS under the section entitled "Prevalence of Disease."

Smallpox.—The incidence of smallpox during the current 4-week period continued to be high in relation to the experience of recent years, but was slightly more favorable than that indicated in the preceding report. Reported cases numbered 4,442, as compared with 3,295 for the corresponding period last year. The current incidence continues to be the highest for the last five years. The normal seasonal decline is now under way, however, and the current incidence represents a decline of about 15 per cent from the 5,208 cases reported during the preceding 4-week period of this year.

Poliomyelitis.—Ninety-seven cases were reported for the period under consideration, as compared with 73 for the corresponding four weeks of last year, and with 56 cases for the preceding period of this year. In California the number of cases increased in successive 4-week periods from 12 to 40, representing an increase considerably greater than the normal seasonal rise.

Meningococcus meningitis.—This disease was, during the period of this report, still in an epidemic stage, but the decline in epidemic intensity has continued, to which attention was called in the last report. Reported cases numbered 666, as compared with 1,054 for the corresponding period last year and with 1,011 this year. There is evidence that the epidemic has passed its crest in all regions except the Southern group of States.

Measles.—The incidence of measles was at its seasonal peak during the period of this report, 70,618 cases being reported, as compared with 52,725 for the period of last year and 67,530 for the preceding 4-week period of 1930.

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[1] From the Office of Statistical Investigations, U. S. Public Health Service.

[2] The numbers of States reporting for the various diseases are as follows: Typhoid fever, 41; poliomyelitis 43; meningococcus meningitis, 42; smallpox, 42; measles, 38; diphtheria, 42; scarlet fever, 41; influenza, 31.

Typhoid fever.—The incidence of typhoid fever continues at its record low level. The reported cases numbered 719, as compared with 933 for the corresponding period of last year.

Scarlet fever.—The incidence of 13,651 reported cases of scarlet fever represents a low level for this period during the past five years. Last year 16,625 cases were reported during the corresponding period.

Diphtheria.—Diphtheria continues its gratifying decline. The current incidence represents the lowest on record for this season. There were 3,696 cases reported, as compared with 5,511 for the period last year.

Influenza.—Influenza incidence also represents the low point for the period during the past five years. Reported cases numbered 1,133, as against 1,433 for last year and 2,545 for the preceding period of this year.

Mortality, all causes.—According to the Weekly Health Index of the Bureau of the Census, the mortality from all causes averaged 13.0 per thousand population (annual basis), as compared with 12.9 for the same period last year.

COURT DECISION RELATING TO PUBLIC HEALTH

Law relating to collection and disposal of garbage construed.—(Indiana Supreme Court; Jansen Farms, Inc., *v.* City of Indianapolis (Sanitary District), 171 N. E. 199; decided Apr. 22, 1930.) A statute provided:

> It shall be the duty of each such department of sanitation to haul away and to dispose of all garbage; that is to say, kitchen refuse from cooking food, found in its sanitary district, from private kitchens and the kitchens of all other establishments and institutions, and no other person may lawfully haul away from the place of its production any such garbage produced or found in any such sanitary district, and any other person convicted of such hauling shall be fined for each offense in a sum not greater than $25.

A corporation purchased from a hotel and certain restaurants all of the food materials left from the tables and from the preparation of food for the tables. These food materials were removed in a sanitary manner from the hotel and restaurants by the corporation and taken outside the city and fed to hogs. The city of Indianapolis (sanitary district) sought permanently to enjoin the corporation from removing and disposing of the food materials mentioned.

The trial court's judgment was in favor of the city, but the supreme court reversed such judgment. The appellate court said that the law rather narrowly defined garbage to be "kitchen refuse from cooking food," and that such definition could not be extended. The court held that the food materials purchased and removed by the corporation were not garbage within the terms of the statute.

DEATHS DURING WEEK ENDED JUNE 7, 1930

Summary of information received by telegraph from industrial insurance companies for the week ended June 7, 1930, and corresponding week of 1929. (From the Weekly Health Index, June 11, 1930, issued by the Bureau of the Census, Department of Commerce)

	Week ended June 7, 1930	Corresponding week, 1929
Policies in force	75, 759, 190	74, 308, 445
Number of death claims	13, 685	14, 333
Death claims per 1,000 policies in force, annual rate	9. 4	10. 1

Deaths from all causes in certain large cities of the United States during the week ended June 7, 1930, infant mortality, annual death rate, and comparison with corresponding week of 1929. (From the Weekly Health Index, June 11, 1930, issued by the Bureau of the Census, Department of Commerce)

City	Week ended June 7, 1930		Annual death rate per 1,000, corresponding week, 1929	Deaths under 1 year		Infant mortality rate, week ended June 7, 1930 [2]
	Total deaths	Death rate [1]		Week ended June 7, 1930	Corresponding week, 1929	
Total (64 cities)	7,354	13.0	12.1	650	658	[3] 58
Akron	41			4	5	37
Albany [4]	38	16.5	14.3	2	3	44
Atlanta	107	21.9	15.7	19	10	201
White	53			9	4	286
Colored	54	(5)	(5)	10	6	159
Baltimore [4]	222	13.9	11.1	17	20	58
White	169			14	15	60
Colored	53	(5)	(5)	3	5	49
Birmingham	68	15.9	17.6	7	11	65
White	34			2	3	31
Colored	34	(5)	(5)	5	8	118
Boston	200	13.0	13.9	24	27	68
Bridgeport	22			1	4	17
Buffalo	154	14.4	14.4	11	21	49
Cambridge	31	12.8	12.0	3	2	56
Camden	37	14.2	12.7	1	6	18
Canton	31	13.8	5.8	6	3	149
Chicago [4]	724	12.0	12.5	44	83	39
Cincinnati	168			16	6	95
Cleveland	220	11.4	11.5	16	16	48
Columbus	87	15.2	10.8	7	7	68
Dallas	56	13.4	11.7	2	0	
White	39			1	0	
Colored	17	(5)	(5)	1	0	
Dayton	58	16.4	12.7	6	3	89
Denver	82	14.5	10.8	11	3	115
Des Moines	38	13.0	12.4	5	8	87
Detroit	320	12.1	12.7	45	46	70
Duluth	27	12.1	5.8	1	0	27
El Paso	35	15.5	12.8	6	3	
Erie	29			0	2	0
Fall River [4]	24	9.3	10.1	4	4	92
Flint	40	14.0	9.8	7	5	82
Fort Worth	40	12.2	9.2	6	6	
White	26			2	4	
Colored	14	(5)	(5)	4	2	
Grand Rapids	39	12.4	11.4	4	2	61
Houston	55			3	12	
White	45			1	8	
Colored	10	(5)	(5)	2	4	
Indianapolis	108	14.7	12.7	8	5	60
White	82			4	5	35
Colored	26	(5)	(5)	4	0	215
Jersey City	69	11.1	11.6	9	5	78

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.
[3] Data for 72 cities.
[4] Deaths for week ended Friday.
[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended June 7, 1930, infant mortality, annual death rate, and comparison with corresponding week of 1929. (From the Weekly Health Index, June 11, 1930, issued by the Bureau of the Census, Department of Commerce)—Continued

City	Week ended June 7, 1930		Annual death rate per 1,000, corresponding week, 1929	Deaths under 1 year		Infant mortality rate, week ended June 7, 1930
	Total deaths	Death rate		Week ended June 7, 1930	Corresponding week, 1929	
Kansas City, Kans.	22	9.7	10.6	1	2	24
White	15			0	1	0
Colored	7	(5)	(5)	1	1	217
Kansas City, Mo.	94	12.5	12.0	10	7	78
Knoxville	25	12.4	11.4	5	3	117
White	20			5	1	130
Colored	5	(5)	(5)	0	2	0
Los Angeles	329			28	22	85
Louisville	96	15.2	9.5	6	2	52
White	69			6	2	59
Colored	27	(5)	(5)	0	0	0
Lowell	41			7	4	166
Lynn	24	11.9	8.4	6	2	152
Memphis	82	22.5	16.2	6	3	71
White	38			3	2	55
Colored	44	(5)	(5)	3	1	101
Milwaukee	108	10.3	10.2	18	11	91
Minneapolis	93	10.6	9.3	2	4	13
Nashville	54	20.2	14.6	6	8	93
White	28			3	4	62
Colored	26	(5)	(5)	3	4	190
New Bedford	35			1	8	26
New Haven	31	8.6	9.7	0	4	0
New Orleans	163	19.8	14.3	14	17	81
White	92			8	7	71
Colored	71	(5)	(5)	6	10	101
New York	1,481	12.8	12.2	118	130	50
Bronx borough	199	10.9	11.3	10	17	23
Brooklyn borough	474	10.7	10.2	48	46	51
Manhattan borough	601	17.9	16.6	51	56	84
Queens borough	152	9.3	9.5	6	7	17
Richmond borough	55	19.0	12.1	3	4	56
Newark, N. J.	105	11.6	10.0	11	7	58
Oakland	53	10.1	10.3	2	2	24
Oklahoma City	59			12	7	236
Omaha	54	12.6	8.4	4	3	45
Paterson	32	11.5	17.3	2	3	35
Philadelphia	416	10.5	12.0	30	38	44
Pittsburgh	175	13.5	12.7	16	17	59
Portland, Oreg.	82			3	4	37
Providence	54	9.8	12.2	8	7	73
Richmond	50	13.4	11.3	8	7	119
White	35			6	1	135
Colored	15	(5)	(5)	2	6	87
Rochester	90	14.3	10.0	6	9	53
St. Louis	229	14.1	11.7	10	3	32
St. Paul	52			4	1	41
Salt Lake City [4]	39	14.7	15.5	2	4	31
San Antonio	97	23.2	14.6	26	12	
San Diego	38			2	0	42
San Francisco	163	14.5	15.6	5	5	34
Schenectady	17	9.5	7.3	1	2	31
Seattle	76	10.3	9.0	4	0	40
Somerville	17	8.6	7.6	0	1	0
Spokane	30	14.3	13.9	3	3	78
Springfield, Mass.	41	14.3	10.1	5	5	79
Syracuse	57	14.9	15.4	5	3	62
Tacoma	21	9.9	13.7	0	0	0
Toledo	77	12.8	13.0	9	11	82
Trenton	65	24.4	15.4	6	2	112
Utica	22	11.0	11.5	0	2	0
Washington, D. C.	151	14.3	10.9	12	12	70
White	100			6	4	52
Colored	51	(5)	(5)	6	8	106
Waterbury	22			4	1	102
Wilmington, Del.	35	14.2	7.3	4	1	90
Worcester	45	11.9	11.6	6	3	78
Yonkers	15	6.4	10.7	2	4	48

[4] Deaths for week ended Friday.

[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended June 7, 1930, and June 8, 1929

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 7, 1930, and June 8, 1929

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929
New England States:								
Maine	7			5	69	61	2	0
New Hampshire		5			50	73	1	0
Vermont					44		0	0
Massachusetts	61	59	3	4	1,335	625	2	3
Rhode Island	6	9			38	68	0	0
Connecticut	14	24	8	5	30	197	0	1
Middle Atlantic States:								
New York	118	256	[1] 8	[1] 12	2,574	1,048	8	12
New Jersey	137	99	6	3	1,596	282	6	6
Pennsylvania	72	101			776	1,230	9	21
East North Central States:								
Ohio	33	22	3	12	337	1,182	3	6
Indiana	15	12			144	466	3	2
Illinois	171	147	61	11	629	2,092	7	22
Michigan	61	91		4	1,347	929	26	93
Wisconsin	17	27	2	12	644	1,203	3	4
West North Central States:								
Minnesota	6	17		1	144	444	0	1
Iowa	6	4			166	62	0	0
Missouri	24	42			69	139	6	17
North Dakota	3	14			19	86	0	4
South Dakota	2			1	62	45	0	0
Nebraska	3	10			125	306	0	0
Kansas	10	6		1	318	628	1	0
South Atlantic States:								
Delaware	1	1	1		3	6	0	0
Maryland [2]	15	20	5	12	44	43	1	2
District of Columbia	12	12	2		79	27	0	0
West Virginia	6	6	1	17	59	192	1	1
North Carolina	11	12	2		54	14	1	2
South Carolina	6	7	114	176		7	1	0
Georgia	2	3	13	6	184	30	2	1
Florida	4	8		3	60	61	0	0

[1] New York City only.

[2] Week ended Friday.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 7, 1930, and June 8, 1929—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929
East South Central States:								
Kentucky		3			21	22	1	2
Tennessee	3	8	5	4	94	11	7	0
Alabama	8	11	13	20	130	40	4	0
Mississippi	5	4					3	0
West South Central States:								
Arkansas	3	1	1	21	31	9	1	0
Louisiana	8	10	16	17	23	25	4	3
Oklahoma [2]	5	6	12	4	79	52	0	2
Texas	8	20	23	12	183	140	1	0
Mountain States:								
Montana					46	64	1	2
Idaho	1	1			21	46	1	0
Wyoming	1				54	35	0	0
Colorado	8	3			503	9	0	2
New Mexico	11	3	1	1	62	8	1	0
Arizona		8	3	4	66	19	7	2
Utah [2]		4	6	2	212	5	3	1
Pacific States:								
Washington	3	9			727	168	1	6
Oregon	5	4	8	8	105	156	1	0
California	58	42	20	24	1,934	112	7	11

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929
New England States:								
Maine	0	0	8	22	0	0	1	3
New Hampshire	0	0	13	12	0	0	0	0
Vermont	0	0	5	2	1	1	0	0
Massachusetts	0	0	218	180	0	2	8	6
Rhode Island	0	0	19	9	0	0	0	1
Connecticut	0	0	48	57	0	0	2	0
Middle Atlantic States:								
New York	0	3	402	309	3	2	20	17
New Jersey	1	2	202	120	0	0	6	2
Pennsylvania	2	2	210	256	0	0	10	14
East North Central States:								
Ohio	1	1	157	66	74	39	7	10
Indiana	0	0	88	166	96	88	19	0
Illinois	1	1	391	266	119	69	15	14
Michigan	0	3	273	402	39	65	2	4
Wisconsin	1	0	84	166	6	12	5	8
West North Central States:								
Minnesota	0	0	60	94	4	4	2	3
Iowa	0	2	37	58	97	30	3	3
Missouri	0	0	103	40	39	35	3	8
North Dakota	0	1	8	4	27	4	0	0
South Dakota	0	0	5	5	41	43	0	0
Nebraska	0	0	29	51	53	50	1	0
Kansas	0	0	48	64	53	63	5	4
South Atlantic States:								
Delaware	0	0	5	3	0	1	1	0
Maryland [2]	0	0	71	157	0	0	5	4
District of Columbia	0	1	4	14	0	0	3	0
West Virginia	0	1	15	12	29	21	10	3
North Carolina	5	1	16	13	7	7	16	12
South Carolina	2	3	4	5	4	8	45	127
Georgia	0	0	19	6	0	0	18	14
Florida	0	2	1	2	0	0	1	2

[1] Week ended Friday.
[2] Figures for 1930 are exclusive of Oklahoma City and Tulsa, and for 1929 are exclusive of Tulsa only.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 7, 1930, and June 8, 1929—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929	Week ended June 7, 1930	Week ended June 8, 1929
East South Central States:								
Kentucky	0	0	27	71	20	0	5	7
Tennessee	0	0	41	13	25	15	14	19
Alabama	2	1	8	6	7	0	8	26
Mississippi	1	0	4	5	4	0	24	25
West South Central States:								
Arkansas	1	0	2	11	2	0	12	5
Louisiana	0	0	19	13	26	2	30	23
Oklahoma [3]	0	0	14	26	66	82	9	7
Texas	1	0	18	55	37	165	12	24
Mountain States:								
Montana	0	0	28	7	7	9	2	1
Idaho	0	0	2	3	3	8	0	0
Wyoming	0	0	1	0	14	13	0	2
Colorado	0	0	10	14	7	17	0	3
New Mexico	1	1	8	8	9	1	0	2
Arizona	0	0	6	15	6	12	4	17
Utah [3]	0	0	8	6	1	3	0	0
Pacific States:								
Washington	1	1	15	21	64	29	1	2
Oregon	1	0	14	15	18	21	2	1
California	31	3	114	437	46	27	12	8

[3] Week ended Friday.
[3] Figures for 1930 are exclusive of Oklahoma City and Tulsa, and for 1929 are exclusive of Tulsa only.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
April, 1930										
Kansas	12	32	8	----	3,386	----	0	512	398	10
Nevada	----	----	----	----	38	----	0	----	36	----
Ohio	38	194	92	2	3,521	----	2	1,462	746	52
Oregon	1	25	118	----	402	----	2	109	101	10
May, 1930										
Connecticut	12	54	16	----	232	----	1	287	0	2
Nebraska	4	61	----	3	1,685	----	0	254	288	1
Vermont	----	4	----	----	255	----	0	18	3	----
Wyoming	----	9	----	----	178	----	0	27	41	----

April, 1930	Cases
Chicken pox:	
Kansas	466
Nevada	8
Ohio	1,062
Oregon	156
Diarrhea and enteritis (under 2 years):	
Ohio	11
Dysentery:	
Ohio	1
Food poisoning:	
Ohio	12
German measles:	
Kansas	106
Ohio	167
Impetigo contagiosa:	
Oregon	5
Lead poisoning:	
Ohio	17
Lethargic encephalitis:	
Kansas	5
Ohio	7
Oregon	1

Mumps:	Cases
Kansas	617
Nevada	19
Ohio	837
Oregon	192
Ophthalmia neonatorum:	
Kansas	1
Ohio	104
Paratyphoid fever:	
Ohio	2
Oregon	2
Puerperal septicemia:	
Ohio	5
Rabies in man:	
Kansas	1
Rocky Mountain spotted or tick fever:	
Nevada	1
Oregon	26
Scabies:	
Kansas	4
Oregon	6
Septic sore throat:	
Kansas	4
Ohio	67
Oregon	3
Tetanus:	
Ohio	3
Trachoma:	
Kansas	1
Ohio	5
Trichinosis:	
Kansas	1
Tularaemia:	
Nevada	1
Ohio	68
Oregon	1
Typhus fever:	
Nevada	1
Undulant fever:	
Kansas	5
Ohio	8
Oregon	3
Vincent's angina:	
Kansas	1
Oregon	2
Whooping cough:	Cases
Kansas	343
Nevada	19
Ohio	713
Oregon	208

May, 1930

Chicken pox:	
Connecticut	331
Nebraska	312
Vermont	131
Wyoming	68
Conjunctivitis:	
Connecticut	2
German measles:	
Wyoming	8
Lead poisoning:	
Connecticut	2
Lethargic encephalitis:	
Connecticut	3
Mumps:	
Connecticut	173
Nebraska	65
Vermont	16
Wyoming	42
Rabies in animals:	
Connecticut	3
Rocky Mountain spotted or tick fever:	
Wyoming	15
Septic sore throat:	
Connecticut	5
Nebraska	2
Tularaemia:	
Wyoming	1
Undulent fever:	
Connecticut	1
Vincent's angina:	
Wyoming	3
Whooping cough:	
Connecticut	171
Nebraska	125
Vermont	20
Wyoming	13

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 96 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,770,000. The estimated population of the 89 cities reporting deaths is more than 30,180,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended May 31, 1930, and June 1, 1929

	1930	1929	Estimated expectancy
Cases reported			
Diphtheria:			
46 States	927	1,292	----------
96 cities	471	753	770
Measles:			
45 States	14,414	14,293	----------
96 cities	5,373	3,990	----------
Meningococcus meningitis:			
46 States	131	259	----------
96 cities	54	139	----------
Poliomyelitis:			
47 States	41	18	----------
Scarlet fever:			
46 States	2,710	3,810	----------
96 cities	1,136	1,624	1,053
Smallpox:			
46 States	758	935	----------
96 cities	94	54	59
Typhoid fever:			
46 States	227	274	----------
96 cities	44	41	46
Deaths reported			
Influenza and pneumonia:			
89 cities	487	636	----------
Smallpox:			
89 cities	0	0	----------

City reports for week ended May 31, 1930

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1921 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND								
Maine:								
Portland	2	1	0	----------	0	8	35	2
New Hampshire:								
Concord	0	0	0	----------	0	0	0	0
Nashua	0	0	0	----------	0	0	0	0
Vermont:								
Barre	0	0	0	----------	0	16	0	0
Burlington	0	0	0	----------	0	0	0	0
Massachusetts:								
Boston	46	37	17	----------	0	467	36	17
Fall River	5	2	1	----------	0	1	2	2
Springfield	14	2	1	----------	0	4	3	3
Worcester	12	3	0	----------	0	132	0	0
Rhode Island:								
Pawtucket	13	1	0	----------	0	1	0	2
Providence	17	5	1	----------	0	9	0	4
Connecticut:								
Bridgeport	3	5	1	1	0	1	0	5
Hartford	4	4	2	----------	0	1	0	3
New Haven	8	1	0	----------	0	4	7	2

City reports for week ended May 31, 1930—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MIDDLE ATLANTIC								
New York:								
Buffalo	28	10	5		0	19	23	10
New York	128	252	87	17	4	1,386	120	120
Rochester	7	9	0		0	22	1	3
Syracuse	21	4	0		1	19	51	4
New Jersey:								
Camden	4	6	3		0	4	1	2
Newark	19	12	19	2	0	165	15	2
Trenton	3	2	2		0	0	0	4
Pennsylvania:								
Philadelphia	45	55	15	3	3	246	58	30
Pittsburgh	29	15	16		0	210	12	21
Reading	0	2	1		0	2	15	1
Scranton	4	3	1		0	0	0	0
EAST NORTH CENTRAL								
Ohio:								
Cincinnati	3	6	4		0	56	12	6
Cleveland	85	22	13	2	2	8	36	7
Columbus	6	3	3		1	69	8	4
Toledo	21	4	2	1	1	24	7	2
Indiana:								
Fort Wayne	1	1	0		1	0	0	1
Indianapolis	31	3	1		0	36	7	9
South Bend		1						
Terre Haute	0	0	1		0	31	0	0
Illinois:								
Chicago	58	85	112	3	1	17	48	31
Springfield	0	0	0		0	5	0	2
Michigan:								
Detroit	49	42	41		0	325	52	18
Flint	8	2	0		0	275	1	0
Grand Rapids	4	1	0		0	1	0	3
Wisconsin:								
Kenosha	6	0	0		0	0	0	1
Madison	2	0	2		0	22	1	0
Milwaukee	69	12	2	1	1	10	76	3
Racine	3	1	0	1	0	9	0	0
Superior	12	0	0		0	1	0	0
WEST NORTH CENTRAL								
Minnesota:								
Duluth	10	0	0		0	11	0	1
Minneapolis	95	14	7		1	33	20	3
St. Paul	29	8	0		0	7	6	4
Iowa:								
Des Moines	0	1	1			0	0	
Sioux City	4	0	0			32	1	
Waterloo	6	0	0			1	0	
Missouri:								
Kansas City	16	2	3		0	5	3	8
St. Joseph	0	0	0		0	0	0	0
St. Louis	23	32	23			21	17	15
North Dakota:								
Fargo	2	0	0		0	10	18	1
Grand Forks	0	0	0			0	0	
South Dakota:								
Sioux Falls	0	0	0			2	0	
Nebraska:								
Lincoln	12	0	1		0	0	0	0
Omaha	10	2	5		0	27	0	4
Kansas:								
Topeka	22	0	1		0	79	6	1
Wichita	0	1	1		0	45	4	1

City reports for week ended May 31, 1930—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
SOUTH ATLANTIC								
Delaware:								
Wilmington	2	1	1	----------	0	0	0	1
Maryland:								
Baltimore	78	20	15	----------	0	31	8	24
Cumberland	0	0	0	----------	0	0	0	0
Frederick	1	0	0	----------	0	0	0	0
District of Columbia:								
Washington	14	9	8	----------	0	68	0	5
Virginia:								
Lynchburg	7	0	1	----------	1	14	1	1
Norfolk	8	0	1	----------	0	8	29	1
Richmond	1	0	1	----------	0	1	1	1
Roanoke	2	0	2	----------	0	170	1	1
West Virginia:								
Charleston	4	0	0	1	0	2	2	2
Wheeling	4	0	0	----------	0	7	0	1
North Carolina:								
Raleigh	4	0	0	----------	0	0	0	0
Wilmington	3	0	0	----------	0	0	0	0
Winston-Salem	5	0	0	----------	0	1	4	1
South Carolina:								
Charleston	0	0	0	10	0	0	0	1
Columbia	3	0	0	----------	0	1	4	0
Georgia:								
Atlanta	6	1	0	10	1	38	11	5
Brunswick	0	0	0	----------	0	0	4	0
Savannah	1	0	1	1	0	8	2	2
Florida:								
Miami	2	2	3	----------	0	20	4	1
St. Petersburg	----------	0	----------	----------	0	----------	----------	1
Tampa	2	0	1	----------	0	55	5	0
EAST SOUTH CENTRAL								
Kentucky:								
Covington	0	0	0	----------	0	0	0	0
Tennessee:								
Memphis	10	1	1	----------	3	0	13	5
Nashville	3	0	1	----------	1	42	0	1
Alabama:								
Birmingham	1	1	3	1	1	10	4	8
Mobile	0	0	1	----------	0	4	0	1
Montgomery	1	0	0	----------	----------	0	0	----------
WEST SOUTH CENTRAL								
Arkansas:								
Fort Smith	1	0	1	----------	----------	18	0	----------
Little Rock	0	0	0	----------	0	0	0	3
Louisiana:								
New Orleans	0	6	7	1	1	0	0	13
Shreveport	0	0	0	----------	0	5	5	1
Oklahoma:								
Oklahoma City	0	1	0	1	0	18	2	3
Tulsa	1	0	0	----------	----------	3	0	----------
Texas:								
Dallas	1	3	0	----------	0	99	1	5
Fort Worth	1	0	1	----------	0	12	1	1
Galveston	0	0	0	----------	0	0	0	0
Houston	0	2	4	----------	0	5	0	3
San Antonio	1	2	2	----------	0	3	0	9
MOUNTAIN								
Montana:								
Billings	0	0	0	----------	0	5	2	0
Great Falls	6	0	0	----------	0	0	2	0
Helena	0	0	0	----------	0	1	0	0
Missoula	0	0	0	----------	0	0	0	0
Idaho:								
Boise	0	0	0	----------	0	4	0	1

City reports for week ended May 31, 1930—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MOUNTAIN—contd.								
Colorado:								
Denver		8						
Pueblo	3	1	0		0	29	53	0
New Mexico:								
Albuquerque	3	0	1		1	4	4	1
Arizona:								
Phoenix	0	0	0		0	9	0	3
Utah:								
Salt Lake City	7	3	0		0	229	5	1
Nevada:								
Reno	0	0	0		0	2	0	1
PACIFIC								
Washington:								
Seattle	26	3	0			208	36	
Spokane	14	2	2			18	0	
Tacoma	1	1	2		0	130	0	3
Oregon:								
Portland	9	5	4		0	27	5	7
Salem	6	0	1		0	0	5	0
California:								
Los Angeles	46	12	25	9	0	236	40	14
Sacramento	2	3	1		0	28	11	2
San Francisco	27	15	3	1	1	70	77	2

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	2	3	0	0	0	1	1	0	0	2	22
New Hampshire:											
Concord	0	0	0	0	0	0	0	0	0	0	6
Nashua	1	0	0	0	0	0	0	0	0	0	
Vermont:											
Barre	1	0	0	0	0	1	0	0	0	0	3
Burlington	0	0	0	0	0	0	0	0	0	0	9
Massachusetts:											
Boston	57	77	0	0	0	8	1	2	0	46	201
Fall River	3	4	0	0	0	2	0	1	0	1	27
Springfield	5	2	0	0	0	1	0	0	0	3	37
Worcester	7	15	0	0	0	2	0	0	0	3	44
Rhode Island:											
Pawtucket	1	2	0	0	0	2	0	0	0	2	12
Providence	7	14	0	0	0	3	0	2	0	9	61
Connecticut:											
Bridgeport	9	2	0	0	0	1	0	0	0	0	28
Hartford	3	3	0	0	0	3	0	0	0	2	48
New Haven	4	5	0	0	0	1	1	0	0	9	43
MIDDLE ATLANTIC											
New York:											
Buffalo	22	13	0	1	0	7	0	0	0	13	126
New York	225	159	0	0	0	121	9	6	0	65	1,414
Rochester	8	8	0	0	0	1	0	0	0	6	52
Syracuse	7	6	0	1	0	0	0	0	0	25	63
New Jersey:											
Camden	5	5	0	0	0	0	0	0	0	0	25
Newark	22	31	0	0	0	3	0	0	0	14	89
Trenton	3	3	0	0	0	6	0	0	0	0	41
Pennsylvania:											
Philadelphia	82	103	0	0	0	33	2	0	0	17	448
Pittsburgh	29	26	0	0	0	13	1	0	0	17	185
Reading	3	3	0	0	0	1	0	0	0	1	21
Scranton	2	3	0	0	0	0	0	0	0	1	

City reports for week ended May 31, 1930—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	13	10	2	3	0	12	1	0	0	6	86
Cleveland	35	44	0	0	0	16	1	0	0	57	183
Columbus	7	6	1	0	0	3	0	0	0	3	83
Toledo	8	15	1	3	0	6	0	0	0	0	54
Indiana:											
Fort Wayne	2	0	2	1	0	1	0	0	0	4	25
Indianapolis	11	7	8	8	0	2	0	0	0	8	----
South Bend	2	----	0	----	----	----	0	----	----	----	----
Terre Haute	1	2	0	0	0	0	0	0	0	0	12
Illinois:											
Chicago	102	217	2	1	0	35	2	2	0	56	604
Springfield	3	0	0	0	0	0	1	1	0	1	13
Michigan:											
Detroit	87	93	1	2	0	21	2	0	0	57	248
Flint	8	3	2	5	0	1	0	0	0	18	19
Grand Rapids	7	13	0	0	0	0	0	0	0	3	30
Wisconsin:											
Kenosha	1	2	0	0	0	0	0	0	0	1	6
Madison	2	4	0	0	0	1	0	0	0	20	22
Milwaukee	25	20	0	0	0	10	0	1	0	45	80
Racine	4	3	1	0	0	0	0	0	0	4	16
Superior	2	1	0	0	0	0	0	0	0	0	13
WEST NORTH CENTRAL											
Minnesota:											
Duluth	7	1	0	0	0	0	0	3	0	8	25
Minneapolis	31	8	2	0	0	3	0	0	0	2	80
St. Paul	19	7	0	0	0	3	0	1	0	18	63
Iowa:											
Des Moines	6	8	2	12	----	----	0	0	----	0	31
Sioux City	1	4	1	0	----	----	0	0	----	2	----
Waterloo	2	0	0	12	----	----	0	0	----	0	----
Missouri:											
Kansas City	9	10	1	0	0	4	1	0	0	18	90
St. Joseph	1	3	0	0	0	1	0	0	0	1	25
St. Louis	24	65	2	4	0	15	1	1	1	14	206
North Dakota:											
Fargo	0	0	0	0	0	0	0	0	0	3	7
Grand Forks	1	0	0	0	----	----	0	0	----	0	----
South Dakota:											
Sioux Falls	1	2	0	9	----	----	0	0	----	0	4
Nebraska:											
Lincoln	1	2	----	1	0	0	0	0	0	6	17
Omaha	3	7	3	11	0	3	0	0	0	5	54
Kansas:											
Topeka	2	2	0	0	0	0	0	0	0	14	12
Wichita	2	3	1	2	0	0	0	0	0	8	23
SOUTH ATLANTIC											
Delaware:											
Wilmington	3	9	0	0	0	0	0	0	0	1	33
Maryland:											
Baltimore	27	35	0	0	0	11	2	3	0	21	196
Cumberland	1	0	0	0	0	1	0	0	0	0	10
Frederick	0	0	0	0	0	0	0	1	0	0	1
District of Columbia:											
Washington	18	11	0	0	0	13	1	1	0	3	122
Virginia:											
Lynchburg	0	1	0	0	0	0	0	1	0	5	12
Norfolk	1	1	1	0	0	1	0	0	0	2	----
Richmond	2	5	0	0	0	4	0	1	0	2	42
Roanoke	0	0	0	0	0	0	0	0	0	2	18
West Virginia:											
Charleston	0	0	0	0	0	0	0	0	0	3	10
Wheeling	2	0	0	0	0	0	0	0	0	0	15
North Carolina:											
Raleigh	0	0	0	1	0	1	0	0	1	0	15
Wilmington	0	0	0	0	0	0	0	0	0	11	8
Winston-Salem	0	1	0	0	0	2	1	0	0	12	21

City reports for week ended May 31, 1930—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
SOUTH ATLANTIC—continued											
South Carolina:											
Charleston	0	0	0	0	0	1	0	0	0	2	23
Columbia	0	0	0	0	0	2	1	0	0	4	15
Georgia:											
Atlanta	4	0	4	4	0	8	1	0	0	4	80
Brunswick	0	0	0	0	0	0	0	0	0	0	6
Savannah	0	1	0	0	0	1	1	0	0	1	32
Florida:											
Miami	0	2	0	0	0	3	1	0	0	1	21
St. Petersburg	0	----	0	----	0	0	0	----	0	----	10
Tampa	0	0	0	0	0	0	0	0	0	0	----
EAST SOUTH CENTRAL											
Kentucky:											
Covington	1	1	0	0	0	0	0	0	0	0	22
Tennessee:											
Memphis	4	9	0	0	0	1	2	4	0	1	81
Nashville	2	2	1	3	0	2	2	2	0	0	39
Alabama:											
Birmingham	1	0	3	0	0	11	1	0	0	5	62
Mobile	0	0	0	2	0	1	1	0	0	0	20
Montgomery	0	0	0	0	----	----	0	0	----	0	----
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	0	0	0	0	----	----	1	0	----	0	----
Little Rock	0	1	0	0	0	0	1	0	0	0	----
Louisiana:											
New Orleans	4	0	0	0	0	13	2	5	1	0	145
Shreveport	0	1	1	0	0	3	0	1	0	3	24
Oklahoma:											
Oklahoma City	2	14	2	8	0	1	0	1	0	0	36
Tulsa	2	4	2	1	----	----	0	0	----	9	----
Texas:											
Dallas	2	2	2	1	0	3	1	0	0	5	58
Fort Worth	2	1	2	0	0	3	1	0	0	0	39
Galveston	0	0	0	0	0	0	0	0	0	0	9
Houston	2	0	1	3	0	4	0	0	0	0	76
San Antonio	1	0	0	0	0	12	1	0	0	2	106
MOUNTAIN											
Montana:											
Billings	0	1	0	0	0	0	0	0	0	0	3
Great Falls	1	6	0	0	0	0	0	0	0	0	8
Helena	0	0	0	0	0	0	0	0	0	0	2
Missoula	0	0	1	0	0	0	0	0	0	0	4
Idaho:											
Boise	0	0	0	0	0	0	0	1	0	1	6
Colorado:											
Denver	9	----	0	----	----	----	0	----	----	----	----
Pueblo	1	0	0	2	0	0	0	0	0	3	8
New Mexico:											
Albuquerque	1	0	0	0	0	6	0	0	0	0	13
Arizona:											
Phoenix	1	1	0	0	0	4	0	1	0	0	22
Utah:											
Salt Lake City	2	0	1	0	0	2	0	0	0	44	32
Nevada:											
Reno	0	0	0	3	0	0	0	0	0	0	5
PACIFIC											
Washington:											
Seattle	7	2	1	2	----	----	0	0	----	8	----
Spokane	4	0	5	11	----	----	0	0	----	31	----
Tacoma	3	3	3	2	0	0	0	0	0	3	24
Oregon:											
Portland	4	2	8	13	0	2	0	0	0	10	74
Salem	0	0	0	0	0	0	0	0	0	0	----
California:											
Los Angeles	27	15	4	3	0	25	1	3	1	21	206
Sacramento	2	7	2	6	0	4	1	0	0	5	23
San Francisco	17	8	1	0	0	8	1	1	1	1	158

City reports for week ended May 31, 1930—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
Massachusetts:									
Boston	6	2	0	0	0	0	0	0	0
Springfield	0	0	0	1	0	0	0	0	0
Worcester	1	0	0	0	0	0	0	0	0
MIDDLE ATLANTIC									
New York:									
New York	4	3	4	2	0	0	1	1	0
New Jersey:									
Newark	3	0	0	0	0	0	1	0	0
Pennsylvania:									
Philadelphia	2	2	0	0	0	0	0	0	0
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	1	0	0	0	0	0	0	0	0
Cleveland	0	0	0	0	0	0	0	1	0
Columbus	0	0	0	0	0	0	0	1	0
Indiana:									
Indianapolis	1	1	0	0	0	0	0	0	0
Illinois:									
Chicago	2	0	0	0	0	0	0	1	
Michigan:									
Detroit	12	7	1	0	0	0	0	0	0
Flint	0	2	0	0	0	0	0	0	0
Wisconsin:									
Madison	1	0	0	0	0	0	0	0	0
Milwaukee	0	1	0	0	0	0	0	0	0
WEST NORTH CENTRAL									
Minnesota:									
Duluth	0	0	0	0	0	0	0	1	0
St. Paul	1	1	0	0	0	0	0	0	0
Missouri:									
Kansas City	1	1	0	0	0	0	0	0	0
St. Louis	2	2	0	0	0	0	0	0	0
SOUTH ATLANTIC									
Maryland:									
Baltimore	4	1	0	0	0	0	0	0	0
North Carolina:									
Raleigh	0	0	0	0	1	1	0	0	0
Winston-Salem	0	0	0	0	1	0	0	0	0
South Carolina:									
Charleston	0	0	0	0	13	0	0	0	0
Georgia:									
Atlanta	1	0	0	0	2	0	0	0	0
Savannah [1]	0	0	0	0	3	0	0	0	0
EAST SOUTH CENTRAL									
Kentucky:									
Covington	0	1	0	0	0	0	0	0	0
Tennessee:									
Memphis	4	1	0	0	0	2	0	0	0
Alabama:									
Birmingham	1	0	0	0	0	0	0	0	0
Mobile	0	0	0	0	1	2	0	0	0
WEST SOUTH CENTRAL									
Louisiana:									
New Orleans	1	0	0	0	4	1	0	1	0
Shreveport	0	0	0	0	0	4	0	3	0
Oklahoma:									
Oklahoma City	0	0	0	0	0	1	0	0	0
Tulsa	2	1	0	0	0	0	0	0	0
Texas:									
Dallas	0	0	0	0	1	1	0	0	
San Antonio	1	0	0	0	0	0	0	0	0
									0

[1] Typhus fever: 1 case at Savannah, Ga.

City reports for week ended May 31, 1930—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
MOUNTAIN									
Utah:									
Salt Lake	3	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle	1	0	0	0	0	0	0	0	0
Spokane	1	0	0	0	0	0	0	1	0
California:									
Los Angeles	1	1	0	0	0	0	1	4	0
Sacramento	0	0	0	0	1	0	0	0	0
San Francisco	0	1	0	1	0	1	0	0	0

The following table gives the rates per 100,000 population for 98 cities for the 5-week period ended May 31, 1930, compared with those for a like period ended June 1, 1929. The population figures used in computing the rates are approximate estimates, authoritative figures for many of the cities not being available. The 98 cities reporting cases have an estimated aggregate population of more than 32,000,000. The 91 cities reporting deaths have more than 30,500,000 estimated population.

Summary of weekly reports from cities, April 27 to May 31, 1930—Annual rates per 100,000 population, compared with rates for the corresponding period of 1929 [1]

DIPHTHERIA CASE RATES

	Week ended—									
	May 3, 1930	May 4, 1929	May 10, 1930	May 11, 1929	May 17, 1930	May 18, 1929	May 24, 1930	May 25, 1929	May 31, 1930	June 1, 1929
98 cities	85	135	79	139	[3] 76	124	81	135	[3] 77	124
New England	75	81	60	118	97	94	62	108	51	90
Middle Atlantic	76	190	89	206	78	159	80	188	71	168
East North Central	131	160	104	145	[4] 92	143	117	165	[4] 112	155
West North Central	66	77	44	104	[5] 74	123	70	100	76	110
South Atlantic	46	69	57	64	49	62	49	49	55	41
East South Central	0	21	7	27	40	27	27	14	40	7
West South Central	101	99	78	88	71	110	56	46	52	57
Mountain	43	61	69	52	[6] 0	26	51	61	[6] 0	35
Pacific	71	72	57	39	50	56	69	60	78	58

MEASLES CASE RATES

98 cities	1,332	928	1,443	894	[3] 1,207	890	1,185	903	[3] 882	659
New England	1,779	496	2,109	480	1,688	431	1,719	552	1,426	364
Middle Atlantic	1,353	165	1,365	186	1,410	196	1,150	196	991	183
East North Central	1,015	2,322	936	2,194	[4] 830	2,138	692	2,286	[4] 534	1,597
West North Central	983	1,776	1,243	1,549	[5] 659	1,753	778	1,441	514	1,033
South Atlantic	1,086	434	1,187	521	1,123	474	875	242	725	298
East South Central	209	130	499	41	405	68	641	27	378	55
West South Central	785	343	762	366	788	331	587	430	486	236
Mountain	5,758	444	8,891	296	[6] 4,624	183	6,934	313	[6] 4,624	252
Pacific	2,069	287	2,324	422	1,949	425	2,544	529	1,630	398

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1930 and 1929, respectively.
[3] South Bend, Ind., Sioux City, Iowa, and Denver, Colo., not included.
[4] South Bend, Ind., and Denver, Colo., not included.
[5] South Bend, Ind., not included.
[6] Sioux City, Iowa, not included.
[7] Denver, Colo., not included.

Summary of weekly reports from cities, April 27 to May 31, 1930—Annual rates per 100,000 population, compared with rates for the corresponding period of 1929—Continued

SCARLET FEVER CASE RATES

	Week ended—									
	May 3, 1930	May 4, 1929	May 10, 1930	May 11, 1929	May 17, 1930	May 18, 1929	May 24, 1930	May 25, 1929	May 31, 1930	June 1, 1929
98 cities	303	299	264	289	[3] 230	290	210	268	[3] 186	269
New England	246	278	284	260	239	247	288	281	281	269
Middle Atlantic	300	245	281	209	234	220	215	196	171	193
East North Central	398	467	321	454	[4] 308	472	229	449	[4] 267	447
West North Central	376	262	233	277	[5] 252	281	300	208	209	179
South Atlantic	269	114	222	243	157	210	150	159	115	273
East South Central	148	226	155	130	27	103	115	137	81	123
West South Central	123	274	101	309	78	179	52	118	15	160
Mountain	352	78	360	52	[6] 171	104	292	113	[6] 120	96
Pacific	128	345	151	282	149	297	113	336	83	246

SMALLPOX CASE RATES

98 cities	28	12	24	11	[3] 22	11	20	14	[3] 15	9
New England	0	0	2	2	0	0	0	7	0	0
Middle Atlantic	1	0	0	0	0	0	0	0	1	0
East North Central	21	15	23	17	[4] 15	14	10	20	[4] 13	15
West North Central	129	13	99	27	[5] 117	15	108	15	55	15
South Atlantic	0	0	0	0	4	2	2	4	9	0
East South Central	40	21	7	27	81	14	34	27	34	7
West South Central	34	42	41	8	22	50	11	15	15	19
Mountain	146	122	77	26	[6] 120	148	69	35	[6] 86	52
Pacific	85	39	97	39	54	14	83	75	57	27

TYPHOID FEVER CASE RATES

98 cities	7	8	7	11	[3] 8	9	7	8	[3] 7	7
New England	2	7	0	11	9	9	18	7	11	2
Middle Atlantic	3	5	4	3	7	6	4	5	3	3
East North Central	6	3	3	6	[4] 2	3	5	3	[4] 3	3
West North Central	4	10	8	31	[5] 8	6	8	8	9	17
South Atlantic	5	11	15	15	13	17	11	15	13	19
East South Central	27	27	20	27	47	0	27	75	40	34
West South Central	22	30	4	53	37	65	11	11	22	19
Mountain	51	9	17	0	[6] 0	0	0	17	[6] 17	0
Pacific	7	10	24	7	2	7	7	10	9	2

INFLUENZA DEATH RATES

91 cities	9	8	10	10	[3] 8	8	6	10	[3] 4	7
New England	4	2	9	2	0	2	4	7	0	7
Middle Atlantic	10	6	10	8	7	8	8	8	4	4
East North Central	7	5	9	7	[4] 4	7	5	8	[4] 4	9
West North Central	9	18	3	3	3	0	0	15	3	3
South Atlantic	15	11	5	17	18	7	5	6	4	6
East South Central	22	30	15	37	44	30	22	45	37	0
West South Central	23	8	31	27	4	4	8	27	4	12
Mountain	0	17	0	26	[6] 0	17	9	9	[6] 0	17
Pacific	6	16	9	13	15	22	6	6	3	16

PNEUMONIA DEATH RATES

91 cities	139	123	137	109	[3] 104	106	103	116	[3] 80	105
New England	151	106	120	90	102	88	100	121	89	106
Middle Atlantic	172	136	185	123	130	114	137	129	94	113
East North Central	108	125	93	101	[4] 68	115	80	118	[4] 54	101
West North Central	112	126	124	105	106	75	83	123	68	120
South Atlantic	187	109	121	109	156	120	101	94	82	112
East South Central	140	172	162	149	96	90	88	104	110	112
West South Central	119	90	176	94	84	109	88	66	130	66
Mountain	60	165	120	87	[6] 51	13	120	139	[6] 51	113
Pacific	52	72	64	94	58	47	43	82	64	63

[3] South Bend, Ind., Sioux City, Iowa, and Denver, Colo., not included.
[4] South Bend, Ind., and Denver, Colo., not included.
[5] South Bend, Ind., not included.
[6] Sioux City, Iowa, not included.
[7] Denver, Colo., not included.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—Week ended May 24, 1930.—The Department of Pensions and National Health reports cases of certain communicable diseases in eight Provinces of Canada for the week ended May 24, 1930, as follows:

Province	Cerebrospinal fever	Dysentery	Influenza	Lethargic encephalitis	Poliomyelitis	Smallpox	Typhoid fever
Prince Edward Island [1]							
Nova Scotia			7				1
New Brunswick							2
Quebec							7
Ontario	4		4	1	1	24	5
Manitoba						7	
Saskatchewan						10	3
British Columbia	1	2				2	
Total	5	2	11	1	1	43	18

[1] No case of any disease included in the table was reported during the week.

Quebec Province—Communicable diseases—Week ended May 31, 1930.—The Bureau of Health reports cases of certain communicable diseases for the week ended May 31, 1930, as follows:

Diseases	Cases	Diseases	Cases
Cerebrospinal meningitis	2	Measles	124
Chicken pox	76	Mumps	59
Diphtheria	31	Puerperal fever	1
Erysipelas	4	Scarlet fever	89
German measles	58	Tuberculosis	52
Influenza	2	Typhoid fever	8

CUBA

Habana—Communicable diseases—May, 1930.—During the month of May, 1930, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Chicken pox	40		Measles	14	
Diphtheria	14	4	Scarlet fever	19	2
Leprosy	3		Typhoid fever [1]	11	
Malaria [1]	8	1			

[1] Many of these cases are from the interior.

GREAT BRITAIN

England and Wales—Vital statistics—January-March, 1930.—During the first quarter of the year 1930, 158,671 births and 131,946 deaths were registered in England and Wales, giving a birth rate on an annual basis, of 16.2 per 1,000 population, and a death rate of 13.5 per 1,000. The figures are provisional. The mortality of infants under 1 year of age was 77 per 1,000 live births.

During the 13 weeks ended March 29, 1930, deaths from certain communicable diseases were reported in 107 county boroughs and great towns, including Greater London, as follows:

Disease	Number of deaths	Death rate per 1,000 population [1]	Disease	Number of deaths	Death rate per 1,000 population [1]
Diarrhea and enteritis (under 2 years)	680		Scarlet fever	161	0.03
Diphtheria	698	0.14	Smallpox	9	
Influenza	1,000	.20	Typhoid fever	31	
Measles	1,259	.26	Whooping cough	419	.09

[1] Annual basis.

Deaths from certain communicable diseases were reported in 157 smaller towns for the quarter ended March 31, 1930, as follows:

Disease	Deaths	Disease	Deaths
Diarrhea and enteritis (under 2 years)	93	Scarlet fever	22
Diphtheria	139	Smallpox	4
Influenza	299	Typhoid fever	4
Measles	188	Whooping cough	106

England and Wales—Communicable diseases—Thirteen weeks ended March 29, 1930.—During the 13 weeks ended March 29, 1930, cases of certain communicable diseases were reported in England and Wales as follows:

Disease	Cases	Disease	Cases
Diphtheria	23,327	Puerperal pyrexia	1,488
Ophthalmia neonatorum	1,348	Scarlet fever	35,679
Pneumonia	19,173	Smallpox	4,796
Puerperal fever	729	Typhoid fever	521

JAMAICA

Communicable diseases—Four weeks ended May 24, 1930.—During the four weeks ended May 24, 1930, cases of certain communicable diseases were reported in Kingston, Jamaica, and in the island of Jamaica, outside of Kingston, as follows:

Disease	Cases		Disease	Cases	
	Kingston	Other localities		Kingston	Other localities
Cerebrospinal meningitis		1	Lethargic encephalitis		1
Chicken pox	6	22	Puerperal fever		2
Diphtheria	1		Tuberculosis	27	69
Dysentery	1	3	Typhoid fever	9	32
Leprosy		1			

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From medical officers of the Public Health Service, American consuls, International Office of Public Hygiene, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

CHOLERA

[C indicates cases; D, deaths; P, present]

Place		Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Feb. 9–Mar. 8, 1930	Week ended— March, 1930			April, 1930				May, 1930					June, 1930	
					15	22	29	5	12	19	26	3	10	17	24	31	7	14
China:																		
Canton	C													1	1			
Manchuria—Dairen	C			1														
India	C	12,350	6,461	5,914	1,834	2,278	2,687	4,018		7,436								
	D	6,507	3,606	3,371	929	1,225	1,526	2,186		4,345								
Bassein	C								3	1	1	2	3	4				
	D								2	1	1	1	3	2				
Bombay	C							4										
Calcutta	C	138	202	269	97	53	110	94	137	165	165		194	175	142			
	D	90	110	153	73	25	51	71	85	118	118	93	125	107	83			
Negapatam	C	1	12															
	D	1	4															
Rangoon	C	6	3	3	1	1						1		5	2			
	D	5	3	1	1	1						1		1				
Tuticorin	C	35	3															
	D	9	1															
India (French):																		
Chandernagor	C	1		4	1				1	2		3						
	D	1		2		1		2			4	1		4				
Karikal	C	1		4			1	11		1								
	D			1			1	8		1								
Indo-China (see also table below):																		
Pnompenh	C	3	11	9							2		1					
	D	3	8	7	1	2	1	2							2	2		
Saigon and Cholon	C	1	2	5	1	6	1	6	17	12	19	28	59	40	48			
	D	1	2	4	1	5			10	10	13	22	43	27	24			

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

CHOLERA—Continued

[C indicates cases; D, deaths; P, present]

Place		Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Feb. 9–Mar. 8, 1930	Week ended— March, 1930			April, 1930				May, 1930					June, 1930	
					15	22	29	5	12	19	26	3	10	17	24	31	7	14
Philippine Islands:																		
Bulacan, Malolos	C																1	
	D																1	
Cebu—																		
Bantayan	C																3	8
	D																3	7
Santa Fe	C																1	
	D																1	
Manila	C														[1] 1			
Negros—																		
Cadiz	C															10	2	
	D															7	1	
Escalante	C																1	
	D																1	
San Antonio	C																	1
	D																	1
Rizal—Navatos	C																1	
	D																1	
Siam	C	11	3	7				1	8	7	3		12	4	6			
	D	2		4					6	3	2		10	2	2			
Bangkok	C	9	3	2		1		1	1	5	4	5			6			
	D	1						1	1	2	1				2			
Nagara Pathom	C			1							4	6						
	D			1							2							
On vessel:																		
S. S. at Suva, Fiji Islands	C			1														
S. S. Sutley, at Batavia, from Calcutta	C			1														
S. S. Sassari, at Massoua, from Jeddah	C															1		
	D															1		
On small boat at Port Cebu, from Bantayan Island	C																1	
	D																1	

[1] Diagnosis not confirmed.

Place		November, 1929	December, 1929	January, 1930			February, 1930			March, 1930			April, 1930		
				1-10	11-20	21-31	1-10	11-20	21-28	1-10	11-20	21-31	1-10	11-20	21-30
Indo-China (French) (see also table above):															
Annam [1]	C	2		1			2	2			52				60
Cambodia [1]	C	43	41	71		76	41	3	46	49	32		18	6	
Cochin-China [1]	C	15	46	67		110	64	39	21	5	22	55	48		

[1] Reports incomplete.

PLAGUE

[C indicates cases; D, deaths; P, present]

Place		Dec. 15, 1929-Jan. 11, 1930	Jan. 12-Feb. 8, 1930	Feb. 9-Mar. 8, 1930	Week ended—												
					March, 1930			April, 1930				May, 1930					June, 1930	
					15	22	29	5	12	19	26	3	10	17	24	31	7	14
Argentina:																		
Andalgala.[1]																		
Rosario	C		P															
Santa Fe	C		6															
Villa Lia	D			2														
Azores: Ponta Delgada	C	P																
Brazil:																		
Rio de Janeiro	C		1															
	D		1															
Sao Paulo.[2]																		
British East Africa (see also table below):																		
Tanganyika	C			7						11	33							
	D									10	10							
Uganda	C	127	82	47	30	40		28	27	20								
	D	112	70	43	26	33		28	27	19								
Ceylon:																		
Colombo	C	2	4	3		1	1	2			1		4	1				
	D	1	4	3		1	1	2			1		3	1				
Plague-infected rats			1	3		2			2			2						
Chile: Antofagasta	C		1	1				1				1						
	D							2				1						

[1] On Mar. 11, 3 deaths from bubonic plague were reported in Andalgala, Catamarca Province, Argentina, since Feb. 5, 1930.
[2] 21 cases of plague with 8 deaths were reported Jan. 29, 1930, in the State of Sao Paulo, Brazil; 15 of these cases were in the city of Sao Paulo.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

Place		Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Feb. 9–Mar. 8, 1930	Week ended— March, 1930			April, 1930				May, 1930					June, 1930	
					15	22	29	5	12	19	26	3	10	17	24	31	7	14
Dutch East Indies:																		
Batavia and West Java	C	286	167	153	34	41	23	26	27	16	20							
	D	280	164	150	33	42	23	25	27	16	20							
Plague-infected rats			3	3		2		1		6	2							
Celebes—Makassar	C		1															
	D		1															
Plague-infected rodents		4																
East Java and Madura	C	2																
	D	2																
Java and Madura	D	458	317	296	59	73	45	46	59	40			8					
Ecuador (see table below).																		
Egypt:																		
Alexandria	C	2	4	1	1	1	1	1			1	1	2	3	3	5	3	
	D	3	1			1					1	1			1	2		
Assiout	C	4									7	7	3	9	2	6	4	
	D	2									3	2		3	1	1		
Assuan	C	2																
Beheira	C		2		3	1												
Beni Suef	C				3		1											
Dakahlieh	C	1		8	4		1		2		1	2	3	1	2	5	1	
	D	1			1									1				
Gharbieh	C	2	1								1							
	D	1									1							
Girga	C								1									
Minieh	C														6	1	1	
	D															1		
Port Said	C								1					1	1		1	
Greece (see also table below):																		
Patras	C					P	1											
Piraeus	C		1															
Pyrgos	C							1										
India	C	4,713	4,814	5,639	1,090	1,187	1,005	805		343								
	D	3,093	3,308	3,940	838	911	889	706		229								
Bassein	C		1		2	1												
	D		1		1													
Bombay	C		1	1		2	2	3		4			4	1				
	D		1	1		2	2	1	1	3	4		1	4				
Plague-infected rats		29	28	31	31	7	33	25	20	28	25	35	23	39				

Madras Presidency	C	336	27	230	56	67	14	20	12	15								
	D	174	13	140	34	32	6	15	6	8				1	3			
Rangoon	C	3	3	7		1	2			3		2						
	D	4	2	6		1	2			2	1	1	1	1	1			
Plague-infected rats			1	7			2	1	1	2		1	1	3	1			
India (Portuguese)	D												7					
Indo-China (see also table below):																		
Pnompenh	C		1						2			1	1					
	D		2	13	7	2	2	2	2	1	1				1			
Saigon and Cholon	C	1	2				1						1					
	D	1	2				1											
Iraq:																		
Baghdad	C	2	6	6	2	1	1	3				4	7	11	7	12	12	
	D	1	2	1	1			3				2	3	5	4	6	7	
Basra	C	1																
Naudham	C	1																
Japan: Osaka (vicinity of)—Plague-infected rats		1	7	6	2		1	1	1	1								
Kwang-Chow-Wan	C		25	25				7										
Madagascar (see also table below):																		
Tamatave	C	4								1								
	D	3																
Morocco	C	12	4	48	8	5	26	16	14	41	34	32	19	22				
	D			13	4	1	7	6	6	26	12	11	11	14				
Nigeria: Lagos	C	15	6	7	4	1	7	1					1	1				
	D	15	6	7	4			1					1					
Plague-infected rats		18	44	42	7	12	3	3	3		1		1					
Senegal (see also table below).												1						
Siam	C	11	8	17	1	4	8	3	4			2						
	D	9	6	13	1	3	8	3	4					1	1			
Bangkok	C	1		1	1	1	2	1						1				
	D	1		1	1	1	2											
Nagara Pathom	C	6	7	5				1	4	3	2	1						
	D	5	7	6				1	4	3	1	1						
Nagara Rajsima	C	2	2	2				1		1								
	D	1						1		1								1
Syria: Beirut	C																	
Tunisia:											1		17					
Sfax district	C	14	18	22														
Tunis	C	42	6	5	1													
	D	21																
Union of Socialist Soviet Republics: Kazaks	C	P																
Union of South Africa:																		
Cape Province	C		1	2		1												
	D	7		1		1												
Orange Free State	C	5	15	11	3	1		1	1									
	D	1	9	3	2	1												
Transvaal	C		8	2		1												
	D		3			1												
On vessel:																		
At Rio de Janeiro, Brazil, from Argentina	C		1															

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

Place		November, 1929	December, 1929	January, 1930	February, 1930	March, 1930	April, 1930
British East Africa (see also table above):							
Kenya	C	157	54	34	------	------	------
Uganda	C	179	216	87	------	------	------
	D	164	199	75	------	------	------
Ecuador: Guayaquil	C	14	17	4	2	2	0
	D	3	6	2	2	------	0
Plague-infected rats		9	13	4	2	2	0
Ecuador (outside of Guayaquil)	C	------	19	4	------	------	------
	D	------	5	2	------	------	------
Greece (see also table above)	C	2	1	------	------	------	------
	D	1	------	------	------	------	------
Indo-China (see also table above)	C	------	10	10	30	27	4
Madagascar (see also table above)	C	182	264	282	------	------	------
	D	163	248	258	------	------	------
Ambositra Province	C	42	111	128	49	------	------
	D	33	96	111	41	------	------
Antisirabe Province	C	5	16	26	22	------	------
	D	5	16	25	22	------	------
Itasy Province	C	10	19	31	------	------	------
	D	10	16	31	------	------	------
Madagascar—Continued.							
Miarinarivo Province	C	5	3	------	25	------	------
	D	5	3	------	25	------	------
Moramanga Province	C	4	12	22	7	5	------
	D	3	12	21	4	5	------
Tamatave Province	C	------	2	3	------	------	------
	D	------	2	1	------	------	------
Tananarive Province	C	103	97	88	110	------	------
	D	93	98	83	107	------	------
Senegal:							
Baol [1]	C	23	5	------	------	18	24
	D	16	2	------	------	8	12
Dakar [1]	C	17	8	------	------	------	1
	D	5	1	------	------	------	------
Louga [1]	C	------	------	------	2	------	33
	D	1	------	------	------	------	10
Thies [1]	C	------	------	3	------	3	12
	D	------	------	------	------	2	9
Tivaouane [1]	C	8	------	1	------	11	61
	D	4	------	------	------	8	35

[1] Incomplete reports.

SMALLPOX

[C indicates cases; D, deaths; P, present]

Place		Nov. 17–Dec. 14, 1929	Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Feb. 9–Mar. 8, 1930	Week ended— March, 1930			April, 1930				May, 1930					June 7, 1930
						15	22	29	5	12	19	26	3	10	17	24	31	
Algeria:																		
Algiers	C	3		6	1	2	2	1		1					1			
Constantine	C			1														
Oran	C	3		5		1												
Arabia: Aden	C	4	1	1	2		1	1	1			1						
	D	1																
Bolivia: La Paz (see table below).																		
Brazil: Rio de Janeiro	C		1															
British Borneo: Sarawak	C			4	19													
British East Africa (see also table below):																		
Tanganyika	C	50	27	5	49	17	32	53	1									
	D	10	5		8	3	1	3										
British South Africa:																		
Northern Rhodesia	C	54																
Southern Rhodesia	C	58	33	1	6											42		
	D	4	6													8		
Canada:																		
Alberta	C	22	16	22	4	2	5	2	1	3	1							
Edmonton	C	11	15	19	1	1		1	2	3								
British Columbia—Vancouver	C	14	17	16	16	1	7	3	9	8	1	5	3			2		
Manitoba	C	6	8	6	2	2	1	1		2			2			7		
Ontario	C	63	51	63	86	38	27	26	9	17	30	18	12	14	24	24		
Fort William	C			4														
North Bay	C	2		2	1									1				
Ottawa	C	4	7	10	11	9		6	4	8	4	7	2	3	10	7	5	6
Toronto	C			2												3	1	2
Quebec	C	10	3	11														
Montreal	C			1														
Saskatchewan	C	40	61	86	76	9	11	15	12	3	10	7	21	20	6	10		
Regina	C		31											1		3		
Ceylon:																		
Angoda, Western Province	C				10								6					
	D				1								2					
Colombo	C		1	1	3													
	D				2													

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		Nov. 17–Dec. 14, 1929	Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Feb. 9–Mar. 8, 1930	Week ended— March, 1930 15	22	29	April, 1930 5	12	19	26	May, 1930 3	10	17	24	31	June 7, 1930
China:																		
Canton	C	4	5	7	11	1	1	4			2	1						
	D			2	3		1		1	1	1		1					
Chungking	C	P	P	P	P	P	P	P	P	P	P	P	P	P				
Foochow	C	P	P	P	P	P			P		P		P					
Hong Kong	C	62	102	118	62	12	10	5	11	20	7		1	5	5	2		
	D	55	73	109	51	6	10	4	5	11	9	3		4	2	3		
Manchuria—																		
Harbin	C	2	1	3							1							
Kwantung—Dairen	C		1	6	5						1			1		7		
Nanking	C		P	P	P	P				P			P	P				
Shanghai—																		
Foreigners only	C	5	7	5	2	1		1		2	1							
Including natives	D	2	6	8	7	4	1	3	2	4	3	2	1		1	2		
Swatow	D		2	3	6		3	2	1	2			1	1				
Tientsin	C	4	2	1	1		2			1				1				
Chosen (see table below).																		
Colombia:																		
Baranquilla	C		1		102					1								
Buenaventura	C	56	13		1	1	1			7	5	2	1	2				
	D	1																
Costa Rica:																		
Port Limon	C											1	2					
San Jose [1]	C							10		7								
Curacao (alastrim)	C					10	3		1			1	1	2				
Dahomey (see table below).																		
Dutch East Indies:																		
Belawan Deli	C	1	1															
Borneo	C			1			25	98	62	17	43	20	10					
	D			1			1	5	6	16	12	2	1					
Java—																		
Batavia and West Java	C	37	17	14	14	2	10	16	50	30	25	8	1	1		5		
	D	8	10	7	7	1	1	2	2	6	1	3	1	1				
East Java and Madura	C	13																

Sanggi Islands	C	105	17	25	12		5											
	D	6	3				1											
Sumatra	C	1	1	2		48												
	D					5												
Egypt:																		
Alexandria	C	5																
Port Said	C			2						1								
Great Britain:																		
England and Wales	C	994	1,005	1,455	1,530	433	361	449	457	423	345	353	306	462	324	304		
Ashton under Lyne	C	6	3	4	29	5	4	2	4	9	3	4	2	6	3	4		
Bradford	C	20	8	5	2					1			2		1			
Cardiff	C	1						2		1	2							
Leeds	C			6	11	6	3	4	3	1	1							
London	C	321	480	597	699	210	124	195	181	169	169	129	137	222	138	148		
London and Great Towns	C	783	799	1,101	1,156	323	243	350	332	308	264	265	229	339	250	235		
	D	1		2	5	1		1	1	2	1	1						
Newcastle on Tyne	C	1																
Sheffield	C							5	3	1	1							
Stoke-on-Trent	C	1	12	12	41	18	23	40	41	17	23	33	12	19	9	13		
Greece: Patras	C		1															
Hedjaz	C	6	11	11														
India	C	7,644	12,789	26,524	36,036	9,269	10,122	10,174	9,764		7,786							
	D	1,963	3,730	6,186	7,710	1,826	2,128	2,213	1,948		1,543							
Bombay	C	42	119	342	638	233	187	114	184	143	114	89	84	52	68	58		
	D	14	57	164	314	123	114	78	116	88	78	64	44	33	49	44		
Calcutta	C	54	88	185	399	106	155		100	153	116	122		109	70	52		
	D	39	62	130	287	77	138		90	124	97	103		94	72	40		
Cochin	C	387	234	234	184	87	71	72	61	56	49	58	20	13	8	7		
	D	72	20	27	29	14	11	3	7	3	4	6	2	5	1	2		
Karachi	C	7	17	30	38	14	13	12	8	10	9	7	4		6	7		
	D	2	11	9	16	5	3	3	4	10	3	2	2	2		1		
Madras	C	64	85	105	159	38	53	43	39	55	26	27	25	24	13	15		
	D	11	16	16	29	8	9	12	7	6	6	5	10	4	5	6		
Moulmein	C	6	18	65	143	39	43	40	25	10		33		27	29	20		
	D	3	9	18	40	15	9	8	9	4		3		4	6	5		
Negapatam	C	1			1											1		
Rangoon	C	1	2	7	7	5	1	3	1		1	1	2	2		3		
	D			4	2	2	1	2						1				
Tuticorin	C			3												5		
Vizagapatam	C		2	5	9	4	8	53	4	1		2	3	3	1	1		
	D				1	1	1	14	2	1			1		3			
India (French):																		
Chandernagor	C			3	11		4	2		4		6		6	2	8		
	D				5			2				2		2	4	1		
Karikal	C	1		3	12		10	12	2	8	9	2		6	5	1		
	D	1		3	8		5	2		3	3	2		2	1			
Pondicherry Province	C	7	20	22	52		9	12		12	1	11		9	13	10		
	D	7	19	19	40		7	6		11	1	8		7	12	10		
India (Portuguese)	C	1		16	50	5	21	3	9	5	6							
	D				6		1		1									

[1] 5 cases of smallpox were reported Apr. 14 in Costa Rica outside of city of San Jose.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		Nov. 17–Dec. 14, 1929	Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Feb. 9–Mar. 8, 1930	Week ended— March, 1930 15	22	29	April, 1930 5	12	19	26	May, 1930 3	10	17	24	31	June 7, 1930
Indo-China (see also table below):																		
Pnompenh	C													1		1		
	D			1							1	1						
Saigon and Cholon	C		4	3	4		2		1			4		1				
	D		2	3	2		1				1	3	1		1			
Iraq:																		
Baghdad	C	20	16	7	3					1	2	3	2					
	D	10	5	3	1								1					
Basra	C	5			1								1					
Diyalah Liwa	C	46																
	D	7																
Kirkuk Liwa	C	70																
	D	19																
Mossoul	C	48	80	26	12						22			13		8		
	D	17	3	7	2						3			2		1		
Ivory Coast (see table below).																		
Macao	D				2	1	2			1			1	1				
Mexico (see also table below):																		
Jalisco (State): Guadalajara	D	6	9	9	14	3	7	5	7	6	4	8	2			6	1	
Juarez	C	11	3	2	3				2									
	D	2	2	1	1													
Mexico City and surrounding territory [1]	C	19	25	30	38	26	13	21	46	36	19	20	24	30				
	D	9	4	7	21	3	9	6	13	14	8	14	11	6				
Morelos State. [1]																		
Progreso	C															1		
	D															1		
San Luis Potosi	C				1													
	D				1													
Morocco (see table below).																		
Netherlands: Rotterdam	C	5	1															
	D	1																
Nigeria (see also table below): Lagos	C		2	5	2				1	1								
	D		1	2														

Persia (see table below).																		
Philippine Islands: Sarangani and Balut Islands [3]	D		40	18	3													
Poland	C	4	2		2							2			1			
Portugal:																		
Lisbon	C	3	6	4	7		4	1	2	2	3	3		6		2		
Oporto	C	1																
Rumania	C			1	1													
Siam	C	3	42		2					2	2	2		2				
	D	1	9	1							2	2						
Somaliland, British: Boales	C	24	5	35	19		2											
	D	9	9	8	2	2	3	1										
Straits Settlements	C			2				2	3	2	1		2	1	3	2		
	D			1				1		1			1		1	1		
Sudan (Anglo-Egyptian)	C	254	290	230	79	8	5	22	25	2	9	31			5	13		4
	D	45	65	34	6		2		3	1		3				1		
Sudan (French) (see table below).																		
Syria (see table below).																		
Tunisia: Tunis	C	47	20	7	3			2	1			1	3					
Turkey (see table below).																		
Union of South Africa:																		
Cape Province	C	P	P	P	P	P				P		P						
Natal	C	P																
Orange Free State	C	P	P	P	P	P	P											
Transvaal	C	P	P	P	P	P												
Upper Volta	C				26	1	1			2								
Zanzibar	C					9	2		2									
On vessel:																		
S. S. Tairoa, at Liverpool, from London	C				1													
S. S. Karagola, at Zanzibar, from India	C			4														
S. S. Karagola, at Lourenço Marques, from India	C				1													
S. S. Elysia, at Port Sudan, from Bombay	C										1							
S. S. Naldera, at Port Said	C													1				

[1] During the month of March, 1930, 100 cases of smallpox were reported in Mexico City, Mexico, and surrounding territory.
[2] Newspaper reports of Feb. 4 show an epidemic of smallpox in Ionacatepec, Morelos State, Mexico, and vicinity giving 600 deaths in preceding 2 weeks.
[3] On Feb. 1, 1930, 317 cases of smallpox with 102 deaths were reported to that date in the Sarangani and Balut Islands.

112957°—30——4

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		October, 1929	November, 1929	December, 1929	January, 1930	February, 1930			March, 1930			April, 1930		
						1-10	11-20	21-28	1-10	11-20	21-31	1-10	11-20	21-30
Belgian Congo	C	-------	42	74	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
	D	-------	2	4	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Dahomey	C	4	19	19	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Indo-China (see also table above)	C	128	245	142	460	148	286	-------	-------	-------	26	261	-------	-------
Ivory Coast	C	-------	-------	-------	-------	-------	-------	-------	-------	7	-------	-------	-------	-------
Sudan (French)	C	-------	P	17	229	12	P	201	-------	200	409	371	-------	150
	D	-------	-------	-------	25	1	-------	10	-------	18	31	30	-------	6
Syria: Beirut	C	28	60	25	70	4	7	7	4	8	5	10	2	-------
	D	1	6	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Taiwan: Taihoku	C	-------	-------	-------	-------	-------	31	12	31	12	15	10	2	-------

Place		November, 1929	December, 1929	January, 1930	February, 1930	March, 1930	April, 1930
Bolivia: La Paz	C	22	-------	-------	-------	-------	-------
British East Africa (see also table above):							
Kenya	C	278	168	12	12	6	-------
Chosen	C	2	-------	1	4	-------	-------
Mexico: Durango (see also table above)	D	2	4	12	6	5	4
Morocco	C	41	84	29	74	-------	10

Place		November, 1929	December, 1929	January, 1930	February, 1930	March, 1930	April, 1930
Nigeria	C	228	293	-------	-------	-------	-------
	D	45	70	-------	-------	-------	-------
Persia	C	-------	P	-------	-------	-------	-------
	D	37	-------	-------	-------	-------	-------
Turkey	C	136	883	215	114	-------	3
	D	12	457	66	42	-------	-------

TYPHUS FEVER

[C indicates cases; D, deaths; P, present]

Place		Nov. 17–Dec. 14, 1929	Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Week ended— February, 1930		March, 1930					April, 1930				May, 1930			
					15	22	1	8	15	22	29	5	12	19	26	3	10	17	24
Algeria:																			
Algiers	C	1	14	3	3	------	1	------	2	1	------	3	2	3	2	1	1	2	------
Constantine Department	C	3	2	4	3	2	------	------	2	3	------	6	4	9	2	------	------	4	------
Oran	C	1	------	2	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Bolivia: La Paz	C	14	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Brazil: Sao Paulo.[1]																			
Bulgaria	C	9	41	------	------	------	------	13	9	------	------	------	15	------	------	------	1	------	------
	D	1	2	------	------	------	------	1	------	------	------	------	1	------	------	------	1	------	------
Sofia	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Chile:																			
Talcahuano	D	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Valparaiso	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
China:																			
Manchuria-Harbin	C	------	------	------	------	1	------	1	------	------	------	4	5	------	20	------	------	------	------
Tientsin	C	------	1	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Chosen (see table below).																			
Czechoslovakia (see table below).																			
Egypt:																			
Alexandria	C	------	------	------	------	------	------	------	------	------	1	------	------	------	------	------	------	------	------
Assuan	C	------	9	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
	D	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Beheira Province	C	------	7	14	5	13	------	------	------	------	2	------	------	------	2	------	------	21	9
	D	------	------	------	------	5	------	------	------	------	------	------	------	------	------	------	------	4	4
Cairo	C	1	------	------	------	5	------	------	------	------	------	------	------	------	------	------	------	------	------
	D	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Dakahlieh	C	------	11	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
	D	------	2	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Port Said	C	------	------	2	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------
Suez	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Great Britain: Scotland—																			
Glasgow	C	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	1	------
	D	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	1	------

[1] Press reports show that 10 deaths from typhus fever occurred in Sao Paulo, Brazil, from Nov. 3 to 30, 1929.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place		Nov. 17–Dec. 14, 1929	Dec. 15, 1929–Jan. 11, 1930	Jan. 12–Feb. 8, 1930	Week ended— February, 1930		March, 1930					April, 1930				May, 1930			
					15	22	1	8	15	22	29	5	12	19	26	3	10	17	24
Greece (see table below).																			
Iraq: Baghdad Liwa	C		1									2							
	D		1																
Ireland:																			
Irish Free State	C		1																
Dingle—Kerry County	C														3	2			
Swinford—Mayo County	C																	7	7
Northern Ireland—Cookstown	C							3											
Latvia (see table below).																			
Lithuania (see table below).																			
Mexico: Mexico City, including municipalities in Federal District	C	5	6	12	4	2	3			2	1	1	2	1		1			
	D		2	4							1		2	1		1			
Morocco	C	2	6	23		2	8	11	4	7	14	13	6	5	3	1	3	6	1
	D										4	3	2	1					
Palestine	C	1				1			1	1	2	2		1				2	
Peru: Arequipa (see table below).																			
Poland	C	74	61	296		72	55	56	69	54	43	61	59	64	53	67	64	45	34
	D	10	4	21		3	2	3	5	2	2	4	4	2	3	6	2	2	
Portugal: Oporto	C	3					1			2			1						
Rumania	C	103	82	241	88	58	54	93	90		95								
	D	10	5	25	11	2	5	5	7		5								
Tunisia	C	3	2			3											2		1
Turkey (see table below).																			
Union of South Africa:																			
Cape Province	C	P	P	P	P	P	P	P	P	P		P	P	P					
Natal	C	P	P	1	P			3				P	P	P	P				
Orange Free State	C	P	P	P	P	P	P	P	P	P		P							
Transvaal	C												P	P	P				
Yugoslavia (see table below).																			

Place		October, 1929	November, 1929	December, 1929	January, 1930	February, 1930	March, 1930
Chosen: Seoul	C			1		17	
Czechoslovakia	C		3		10	2	42
France	C			1			
Greece: Athens	C	7		6	12	6	3
Latvia	C			2	18		
Lithuania	C	6	4	5	2	70	62
	D	1	1	1		5	4
Peru: Arequipa	D	1					
Turkey	C	10	2	4	2	3	1
Yugoslavia	C	1		6	26	33	46
	D			1	3	5	2

YELLOW FEVER

On April 22, 1930, two cases of yellow fever were reported in Mage, Brazil, located on the Leopoldina Railway, between Rio de Janeiro and Nichtheroy; one case of yellow fever was reported in Campos, Rio de Janeiro Province, Brazil, on May 23, 1930; and one case of yellow fever was reported in the Gold Coast during the week ended December 21, 1929. A case of yellow fever was reported in Monrovia, Liberia, on June 3, 1930.